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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

To Correspondents.

DURING the past month communications have been received from C. N. Bement, D. A. Ogden, W. D. Dickinson, B. Densmore, H., *, C. L. Buswell, A Lockite, J. W. Falley, S. W., S. Davison, C. Robinson, Wm. Jennison, T. R. Stockhouse, R. B. Warren, and A. Willson.

Notices of Agricultural Books, &c.

A DICTIONARY OF MODERN GARDENING, by GEO. WILLIAM JOHNSON, Esq., &c., &c., with 180 wood cuts. Edited by D. LANDRETH, of Philadelphia. Lea and Blanchard.

The above is the title of a handsome volume of 635 pages on Gardening, giving all recent improvements in this most useful and delightful art, as now practiced in the vicinity of London and Philadelphia, with such additional information as may be obtained from books on the subject. It greatly facilitates reference to any peculiar plant, or other matter discussed in the book, to have all its contents arranged in the alphabetical order of a dictionary.

Mr. JOHNSON, of London, has enjoyed the best opportunities to be well informed on horticultural subjects, and has evidently brought to his task a large fund of practical knowledge. The directions which he gives for destroying insects injurious to vegetables and fruits are worth more than the price of a copy of the work. It should be in the hands of every one that has a garden, or land on which to make one.

THE PIG: A Treatise on the Breeds, Management, Feeding, and Medical treatment of swine, with directions for salting Pork, and curing Bacon and Hams, by WILLIAM YOUATT, V. T., &c., &c., illustrated with engravings drawn from life, by WILLIAM HARVEY, Esq. Lea and Blanchard.

AMONG all breeders of domestic animals, the reputation of YOUATT is sufficient commendation for any work from his pen, relating to this department of rural affairs. The rearing of swine and the making of pork are very important branches of American husbandry. Messrs. Lea and Blanchard have done the farming community an essential service in republishing this standard English work.

Both of the above works can be had at S. HAMILTON'S Bookstore, State street, Rochester.

FARMER'S LIBRARY.—The July number of this monthly, edited by the veteran agricultural writer, JOHN B. SKINNER, commences the third year of its existence. It is profusely illustrated, abounds in useful matter, and deserves a place in any farmer's library—giving two volumes of 600 pages each per annum, for five dollars.

TRANSACTIONS OF THE N. Y. STATE AGRICULTURAL SOCIETY, for 1846.

WE had designed to give an extended notice of this volume in the August number of the Farmer: but the claims of our numerous and valuable correspondents upon our columns prevent.

There is much in the Transactions that deserves commendation, and several errors of fact, and blunders in proof reading, which ought to be pointed out, that the like may be avoided in succeeding volumes.

The sentiments advanced by the late President of the Society, in the annual address expected from that officer, in favor of educating farmers in the most thorough manner, meet our hearty concurrence. The Report of the commitee on Agriculture in the House is open to just criticism. Had the author taken the trouble to examine the Comptroller's reports each year since 1841, he would have found that instead of the State annually giving $8,000 for the benefit of Agriculture, as he informs the public, the sum will average only a little over two-thirds that amount since the passage of the law. We tried two or three winters to induce the Legislature to bestow the balance in the Treasury that rightfully belongs to the farming interest in some way that would promote the objects of the law—but in vain.

On page 303 Mr. R. L. PELL is made to say: "By analysis it is found, if a horse be fed on 1000 parts of the common bean, he obtains from it 570 parts of soluble nutritive matter, 426 parts mucilage or starch, and 103 parts of gluten." That is, he gets 1099 parts from 1000. "From 1000 parts of oats he obtains 743 parts of soluble nutritive matter, 641 of starch or mucilage, 15 of saccharine matter or sugar, and 87 parts of gluten or albumen," &c. Here 1000 lbs. of oats give 1486 lbs. of matter, making *of course* 486 out of nothing! No one can make the necessary corrections to these, and a host of similar blunders, without the copy.

The Legislature pays almost as much for printing this annual volume as all the agricultural societies, including the $700 given to the State Society besides, receive from the public treasury. The State has paid for the binding as well as printing of the present volume of 716 pages, which, judging from past bills of this character, has cost some $6,000. Of course we do not object to the appropriation; but we submit that, more attention and time should be devoted in making the volume free from glaring defects. While the Legislature generously foots the printer's and binder's bills, and the Society is investing its thousands in stocks, its annual volume of Transactions should not be what it is.

FARMERS' SOUVENIR.—This is the appropriate title given by Mr. FRANKLIN KNIGHT to a beautiful quarto edition of the Agricultural Correspondence of the illustrious Farmer of Mount Vernon. The volume contains 200 pages, printed and bound in a style worthy of its great subject—Agriculture—and of the immortal name—WASHINGTON.

As an illustration of the accurate manner in which the "Father of his Country" kept his farm accounts, independently of the system and wisdom displayed in his writings, the book deserves to be in the hands of every agriculturist in the Union. It is admirably adapted to be offered as premiums in lieu of money by all agricultural societies, for which purpose we recommend it.

Cheese Dairies.

The best paper in the volume of Transactions of the N. Y. State Agricultural Society for 1846, (lately published,) is one from the pen of B. P. Johnson, Esq., on "Cheese Dairies," together with the answers called forth by the dairymen and women who took the liberal premiums of $50 and $30 offered by the Society.

Had we room, we should gladly copy these communications entire; as it is, we shall attempt a faithful summary, and give the statement of Mr. Bronson of Wyoming, who took the first premium.

The whole number of cows in the State in 1845 was 999,400 which were milked. Of these Mr. J. estimates that one-third are employed in making cheese, or 333,163; producing about 110 lbs. each or an aggregate of 36,744,956 lbs. He says:

In the county of Herkimer, where cheese is more extensively manufactured than in any other in the State, and where the cheese is of superior excellence, much of it commanding in the English market as high prices as the best Cheshire cheese, the amount per cow is 226 lbs. In the town of Fairfield, in that county, 350 lbs. per cow; and in some dairies in that county, as high as 680 lbs. The annual average in one dairy, Mr. Alonzo L. Fish's, for three successive years, was 680 lbs. per cow, and in one of these years 714 lbs. was obtained. (Vide Trans. N. Y. S. Ag. Soc., 1844, pp. 227—3, 9.)

The Cheshire dairies in England average 336 lbs. per cow, and from selected cows 560 pounds.

Did we not know Mr. Fish and have reason to credit what he says, we should doubt whether a cow ever made 714 lbs. of cheese in one year; or that a large dairy averaged 680 lbs. to each cow. We think that the Secretary of the State Society does not exceed the bounds of reason when he says that, all the cows in the State kept for making cheese can easily be brought up to an average of 400 lbs. each per annum. This would augment the product of cheese in New York from 36,744,956 lbs. to 133,265,200 lbs. from the same number of cows. The annual gain would be equal to five millions of dollars. From Mr. and Mrs. Ottley's statement it appears:

That they manufactured from the milk of eight cows, in the months of June and July, 1248 lbs. of cheese from 10,400 lbs. of milk; 100 lbs. of milk averaging 9 lbs. of cheese. The average pounds of milk from each cow daily, is a little over 21 lbs. The highest yield being 23 lbs., and the lowest 15.

The cows are fed hay and grass only, and the calves are reared and swine are kept from the dairy. His farm lies in the town of Phelps, Ontario county; elevation above tide water estimated 450 feet. It is generally level, with some small ridges. He has two hundred acres under cultivation. Fifty acres in pasture and fifty in meadow, the residue under the plow.

The soil is mostly gravel; one-third sandy loam, subsoil gravel, and a small part clay.

The meadows are timothy and clover. The flat land in meadow is red top, which Mr. Ottley states produces the best hay for cows. He plows up his meadows every third year. The pasture land is mostly clover, which is plowed once in two years, if the yield is not equal to two tons per acre.

To the following remarks of Mr. Bronson we ask particular attention. It is a curious and interesting fact, that 100 lbs. of milk in June, when grass contains comparatively little nitrogenous, or cheese-forming elements, gave only 9 lbs. 4 oz. of green cheese; whilst in September, when herbage is rich in nitrogen, an equal weight of milk gave 12 lbs. 7 oz. of green cheese.

Without any knowledge of what Mr. Bronson would say or do, Mr. and Mrs. Ottley remark, "That when the cows were in *clover pasture*, then the cheese was *larger* and *richer* than when in other pastures."

When every branch of rural industry shall be studied as a science, keeping steadily in view the fact that it always takes *something* to make each product of the farm, whether vegetable or animal, and that that something admits of no substitute, but must be the precise thing which God has appointed in the certainty of His unerring laws, then agricultural labor will be most bountifully rewarded. The transformation of cultivated plants into beef, pork, mutton, wool, butter, and cheese; and the cheap production of the crops best adapted to these several objects should command more of the attention of our County and State Agricultural Societies than they have hitherto received.

STATEMENT OF MR. BRONSON.

To the Committee of the New York State Agricultural Society, on Cheese and Dairies.

Gents:—In answer to the several questions submitted in your printed circular, dated Feb. 14, 1846, relating to Cheese dairies, I, Newbury Bronson, of Warsaw, in the county of Wyoming, and State of New York, do state as follows:

Question 1. What is the locality of your farm, its elevation and latitude?

Answer. My farm is located in the town of Warsaw, about 1¼ miles south west from the village of Warsaw, on the hill west of the valley of Allen's creek, from 300 to 400 feet above the creek; gradually descends towards the east.—The hill rises west of my farm, in about four miles, some 500 to 600 feet above the elevation of my farm.

My farm is about 30 minutes (of a degree) south of Rochester, and about 15 minutes west of that place.

Ques. 2. How much land under cultivation; how much in pasture and in meadow?

Ans. About 20 acres under cultivation; 110 acres in pasture, and 50 acres in meadow.

Ques. 3. What is the nature of your soil and subsoil?

Ans. The soil of my present meadows is a deep *black muck*, with a clay hard pan subsoil. The soil of my present pastures is mostly a coarse gravel, with a *sandy loam*. Subsoil the same. The underlaying rock is Shale.

Ques. 4. What plants or grasses do you use for pastures; what for hay. How are your meadows treated; how much hay do they yield per acre?

Ans. White clover and timothy, with a mixture of red top, but the clover predominating for *pasture*. My meadows are timothy and red clover, with a small mixture of red top, and are highly manured from the barn, and no other dressing used. They yield 1¼ tons per acre.

Ques. 5. How many pounds of milk from each cow?—How many from the whole herd?

Ans. I have taken some pains, since receiving your circular, in April last, to ascertain, and think the following correct:

My cows in June last, consisting of 44 in number, gave, on an average, in that month, each, 16 quarts per day, which weighed 8 lbs. 6 oz. per gallon, making the daily yield of each cow in June 33 lbs. 8 oz. The whole herd of course gave 176 gallons each day, weighing 1474 lbs.

During the latter part of the season I had only 37 cows.

Ques. 6. How many pounds of cheese to 100 lbs. of milk? The quantity of milk during the season? The quantity of cheese during the season; the quantity of cheese to each cow?

Ans. The quantity of cheese obtained from 100 lbs. of milk, will vary at different periods in the season. I have taken pains to ascertain the difference in this respect, between the months of June and September. In June, 100 lbs. of milk made 9 lbs. 4 oz. of green cheese. In September, 100 lbs. milk made 12 lbs. 7 oz. green cheese.

Again, there is a difference in the quality of the milk, which will greatly effect the *amount* of cheese obtained from 100 lbs. of milk.

I have selected my *best milk* and made curd from it seperately. I have done the same with my *poorest milk*, taking an equal quantity of each. The poorest milk yields 17 per cent. less curd than the best, as I get it from my cows. I have heretofore had doubt on this subject, but my experiments have removed that doubt entirely.

The average number of cows kept through *the season* is 40. The whole amount of milk obtained during the whole season, computing that portion of the season now unexpired, as an ordinary season, is 170,666 pounds of milk, from which is produced eight tons of cheese *including the butter*, that is, I have made 500 pounds of butter, and that, according to custom, which I think correct, I call equal to half a ton of cheese.

The average quantity of cheese to each cow, including the butter, is 400 lbs.

Remark. The extreme drouth for six weeks this season, cut off the quantity of cheese I have made this year, at least one ton.

Ques. 7. At what time do you commence making cheese?

Ans. I usually begin the 15th of April, and end the 1st of December.

Ques. 8. Do you rear calves? Do you keep swine?

Ans. I do not rear calves. I keep swine. This year kept twenty-five.

Ques. 9. What feed is used besides grass and hay?

Ans. None.

Ques. 10. A particular account of the method of making cheese; the quantity of cheese, and its price in the market, and place where sold?

Ans. For a particular account of my method of making cheese, see a paper hereto annexed, on that subject.

For the quantity made see a part of my answer to the 6th question.

I sold my cheese at my dairy this year, to H. Burrell & Co., of Herkimer county, on the 18th August, at 5¾ cents per pound. The purchaser furnishing boxes, and taking, on the 1st November all the cheese *then* (on 1st Nov.) 25 days old—I delivering it at Cuyler, 15 miles distant—and no allowance made for its greenness; delivering five tons 1st Oct. and the balance 1st Nov.

My last year's dairy I sold in Rochester, in May last, after the market had sensibly declined, at 8 cents per pound.

Ques. 11. The number of cows milked; the breed of the cows and their ages?

Ans. The average number of cows milked this season is 40. Nearly all of the native breed. Their ages are nearly all between 5 and 10 years—a few older, and one or two younger.

Ques. 12. What difference, if any has been observed, in the quantity of cheese yielded from the same quantity of milk given by different cows?

Ans. My answer to this question appears in my answer given to the 6th question, to which I beg leave to refer the committee.

Ques. 13. Has any particular kind of herbage been noticed to have an influence in increasing the proportion of cheesey matter in a given quantity of milk?

Ans. I have made no precise experiments on which I would rely in answering this question, but my observation for years has led me to give a decided preference to *white clover* for a pasture.

My answer to question 14 will be found interspersed in some of my previous answers, and in the annexed paper on my method of cheese making.

Respectfully submitted. NEWBURY BRONSON.

Warsaw, Nov. 11, 1846.

THE Wheat Crop of Ohio, Michigan, &c., (according to statements in letters and papers recently received,) proves much better than was anticipated a few weeks ago. We have similar information from other sections of the country.

Ammonia.

"AMMONIA, Liebig maintains, is a body not indebted to organism for its being; that it is to be classed with iron and potash, soda and oxygen, whose quantity within the organism of plants and animals, and without, is, in general terms, constant. He holds that when the required *physical properties* have been given to a soil, and the necessary inorganic ingredients, in suitable solubility, the *ammonia and carbonic acid*, with healthful falls of rain, will provide themselves."—*Prof. Horsford.*

THE plain English of the above theory is, that the organized carbon and nitrogen in manures of a vegetable and animal origin, are of little or no account in the growth of good crops of grain, grass, and roots. Rains and dews will yield to cultivated plants all the ammonia and carbonic acid that they need; leaving the farmer no greater task than to pulverize his soil, and give it "the required physical properties, and necessary inorganic ingredients." We are not prepared to assert that this view of the growth and nourishment of vegetables is not true; but we can say that its soundness lacks evidence to an extent which should make one hesitate before he adopts the theory for the purpose of making it the basis of a system of practical agriculture.

Does Prof. HORSFORD find abundant evidence that Ammonia exists in the atmosphere independent of the quantity given it by decaying organized bodies, which ammonia falls in rain, snow, and dew to the earth in *larger* quantity than plants and animals furnish to the air? Is this excess of available azote (nitrogen) adequate, not merely to feed all vegetables growing spontaneously on the earth, but to supply the much larger demands of a wheat crop equal to 60 bushels per acre? Unless every acre on a whole continent possesses this excess of ammonia, equal to twice or three times the quantity furnished by forests and natural meadows, and required by them in their organization, how can one acre receive a larger supply, except by human agency?

It is much to be regretted that our State Agricultural Society does not use a small portion of the thousands of dollars which it annually receives from the public, to determine the practical value of Ammonia, both with and without the addition of the phosphates, sulphates, and chlorides found in the ashes of wheat and other crops. For the last thousand dollars paid in premiums for corn crops, in this State, by its several Agricultural Societies, we can not see wherein one new fact of the least value has been brought to light.—Such would not be the case if premiums were offered to gain information in the little explored fields of the organism of cultivated plants and domestic animals. Not a single dollar has ever been given to encourage investigations in vegetable and animal physiology. Men that devote their money to the importation of expensive apparatus, and their time to making researches into these subjects, must work for nothing and find themselves, if they live in the State of New York. Is this wise? Is it just? Pure science,

unmingled with private speculation—science that looks only to the public good—can find neither land nor buildings in the Empire State which it can occupy without paying a ruinous rent.

One word more on the subject of Ammonia. Before Mr. Horsford went to Europe, if we mistake not, he was present at an Agricultural Meeting in the Geological Rooms of the old State Hall, Albany, at which Mr. Humphrey, then Mayor of the city, stated that, on two acres of the naturally sterile sand plains near that city he had raised 120 bushels of shelled corn, simply by putting a handful of the scrapings of horns obtained at a comb factory, in each hill at planting. On another acre hard by, of equal quality, on which no horn shavings were applied, the yield was less than 15 bushels. Did the large amount of ammonia, furnished on the decay of this highly nitrogenous substance, do no good in the way of augmenting the crop four fold? We should like to hear something farther on this important subject, from our friend Prof. H.

Action of Lime on Soils.

It would be amusing to publish, in one volume, all the reasons that have been given why lime is so beneficial in agriculture(!) were it not for the recollection of the mischief that the writers have done in leading farmers astray, and causing them to throw away their money.

All may remember the various reasons that philosophers assigned to show why a pail of water would not weigh more with a fish in it than without the fish. At length one of them suggested a doubt as to the fact! This led them to weighing, and weighing to laughing at each other.

If this question could be settled at once by the steelyard, some would laugh, but more would have reason to cry.—Our New England and our New York papers have had less and less to say in favor of the action of lime on soils in general, for a number of years past. But occasionally an anonymous writer puts forth the old puffs in favor of lime, assuming the position that it is beneficial on all kinds of land.

A writer in the Maine Farmer, under the signature W., came out last week with the following explication in the name of Von Thaer:—

"Action of Lime.—'Both the chemical action of lime, and the effect which it produces as a manure,' says Von Thaer, 'appear to be of two kinds. On one hand, it acts on the *humus* by accelerating its decomposition, and rendering it soluble, and thus fit to enter the minuter fibres of the roots of plants. This is the reason that an amelioration, composed of lime, is the more efficacious the richer the soil is in humus, and that its action is the more sensible the more this humus is of an insoluble nature. Lime deprives sour humus of its acidity, and renders it fertilizing. But, on the other hand, there is every probability that by means of its carbonic acid, lime also produces some other effect, and furnishes the plant with some nutritive matter. The roots of some vegetables, in a particular manner, appear to have the faculty of depriving lime of its carbonic acid, which it immediately re-absorbs in equal proportion from the atmosphere, with which it comes in contact.' These hints are important. W."

☞ It will be recollected by many of our readers that more than one correspondent of the Ploughman after trying the experiment, *denies the fact* that lime is useful on sorrelly soils—one of them says it rather promoted the growth of sorrel, than otherwise.

In regard to another operation of lime, in the article now quoted, we undertake to dispute the *fact* stated. We say *lime does not accelerate the decomposition of humus, or of any vegetable matter.* And any one may satisfy himself of this by trial.

We have long suspected, as our readers know, that lime is of no service unless it be to correct the acid occasioned by the prevalence of iron ore in the soil. This ore gives it a red color; it is often found in clayey soils, but not in what we call sandy, the prevalent soil of Massachusetts. When this is generally known, the papers will have it. Till then the old saw will go the rounds; and lime will be numbered by copyists among the excellent things to be applied to all kinds of soil.—*Massachusetts Ploughman.*

Without endorsing what is said by the writer in the Maine Farmer, we must express our surprise that the action of lime is a matter of so much dispute in New England; and to hear the editor of an agricultural journal question its value "unless it be to correct the acid occasioned by the prevalence of iron ore in the soil."

At the risk of being placed among the "copyists" and dealers in "old saws," on the books of the Ploughman, we must call attention to the fact that, no other single element found in all cultivated plants, has been so generally, and so successfully used as a fertilizer both in Europe and in this country, as this same mineral called *lime.* As Caleb Cushing would say, this is "a fixed fact."

It would be no easy task to make a sound healthy bone in the body of any animal, unless there was a little lime in the food on which such animal subsisted. And if the soil was quite devoid of this mineral, how could the plants raised upon it, to feed man and his domestic animals, extract lime therefrom?

Will the *Ploughman* assert that all soils contain a supply of available lime, fully equal to the utmost demand of wheat and all other crops? If so, how does it happen that the limestone lands of Western New York have yielded for the last 30 years so fine crops of this bread-bearing plant, while all the counties in this State and New England, where lime exists in its minimum quantity, wheat culture is almost unknown? Facts like these can hardly be put down by a sneer at "copyists and old saws." It is confessedly by the use of lime mainly, that hundreds of farmers in Maryland are renovating their worn out fields, and harvesting good crops of wheat and grass. The same is true in Virginia and portions of Pennsylvania. But it is no less true that, lime *alone* will not suffice on the granite soils of New England, nor elsewhere to bring forth abundant crops. No one mineral can perform the office in the vegetable economy which God has assigned to the joint agency of some eight or ten earthy substances. You might as well expect to increase the human race on a remote island in the Pacific, whose every inhabitant is an old bachelor. No such caustic single blessedness as lime alone, by neutralizing acid, will impart fertility to the earth.

If the Massachusetts farmers will mix with their lime all the other ingredients that nature uses in organizing the crop cultivated, we venture to assert that lime will do its share in giving fecundity to the soil. Don't say that both blades of a pair of shears are worthless, because neither half can cut alone.

Plant More Trees!

Under the above head the Farmer's Monthly Visitor has a capital article, from which we learn several interesting facts. Gov. Hill, the editor, says that "Valuable pine timber lots are now grown, whose origin was in the seed less than fifty years ago." The opinion has pretty generally prevailed that pines grown by artificial culture are nearly worthless for timber. We see no reason why this should be so, any more than oak, chestnut, or ash. Mr. H. remarks that "Nature does every thing to make up for man's neglect in the planting and growth of trees; nor is she slow in her operations. She has made every acre of waste land in New Hampshire valuable. The beautiful chestnut timber so much used in the New England railroads grows spontaneously in all our poorest rocky lands which have been considered too hard for cultivation: the railway chestnut cross timbers are worth, standing, on the average, sixteen cents apiece; trees of the suitable size making sometimes three and four cuttings. It is said these chestnut trees will grow to the suitable size of posts in the years that these posts rot in the ground. A remarkable feature in the chestnut is, that where a main tree is cut, sprouts the same year shoot forth from the roots growing up a clump of trees, some three to six of which soon grow into sizes to be used for timber."

We have had some little experience in attempting to raise a small forest of chestnut timber from the seed, but with poor success. We have been told that the seeds should never get dry after they ripen in the fall, before they are planted, either in pots or a nursery. Such is the demand for fence posts and railroad ties, that the culture of chestnut timber, we are confident, can be made profitable. Every farmer has a wood lot, and as he thins it out, or cuts it off, he should set the ground full of small chestnuts.—Under favorable circumstances they grow rapidly.

It is safe to calculate on the growth of a cord of wood on an acre per annum in Western New York. This, at $2, is much better than no income—while the annual burden of leaves that fall to the earth enrich the land.

Shade trees are equally an ornament and luxury during the intense heat of our summer months. Speaking of these the Visitor says:—"We boast in the southerly part of the Concord Main street as beautiful elms as can be shown in any part of the world. There are many charming villas in the country range about Boston; but we must say of these that their cleaned path avenues shaded and covered over by trees high before reaching the limb, or surrounded by the shrubbery which entirely shuts out access of foot or of eye, do not compare with the unadorned beauty of the row of elms opposite on the street to the place of our writing. There is a remarkable similarity in the spread of the isolated elm, which is a native of our intervale and stands either on that or the first upland of the river bank. The men who sat out our stately elms seventy-five and a hundred years ago, Hall, Shute, and others, have passed away: at this season, when hundreds of birds come there and build their nests, the elegant gold-robin, the gay blue-bird, the chattering wren, and even the shy crow, black-bird, the snarling cat and scolding thrush both sing so beautifully and so alike when undisturbed as to be mistaken each for the other—there is a charm in these venerable trees which bids us remember those who planted them there, and to present them as proof that planting trees is one of those "good deeds" of men which live after them."

Deep and Thorough Tillage.

We have noticed with pleasure that most farmers in this section have become converts to the system of deep plowing and fine tilth. Instead of making their soil mellow only four or five inches deep, as is still practiced by a few, the general custom is to plow from seven to ten inches, and thoroughly pulverize the earth to an equal depth with the harrow and cultivator. Experience has taught them that a deep mellow soil is vastly more productive, other things being equal, than a hard shallow one. We expect soon to see a few enterprising men driving a second plow in the furrow of the one that breaks the surface, and thus secure to their crops a double amount of pervious soil, in which a double quantity of soluble mineral elements may feed and bring to maturity a double harvest. Very few fields in Western New York lack vegetable mold. So far as the atmosphere supplies nutritive elements, these are mainly dependent on the large develope of roots. A root of corn or other plant which is one-fourth of an inch in circumference and five inches long presents to the soil, the rains, dews, and air of heaven, only *one-third* the surface for imbibing nutrition that it would if ten inches long and three-eights of an inch in circumference. In a deep mellow soil and a large growth of roots, the husbandman is sure to have a corresponding growth of green stems and leaves above ground, to imbibe gaseous food from every passing breeze. The atmosphere can only fulfil its whole great office in support of vegetation on deep pervious soils like river bottoms.

If the earth lacks any essential ingredient used by nature in the organization of the cultivated plant, no amount of tillage can create the absent element out of nothing. This fact should never be lost sight of.

We have a parsnip in our office 3½ feet long; and have pulled beans in a field, whose roots ran 30 inches into the ground. To give plants a fair chance in a poor soil, it should be very deep that roots may travel a good way to get their aliment.

Hydraulics for Farmers.

BY C. N. BEMENT.

Nothing adds more to the comfort of a farm house, or to the cleanliness of its inmates, than the luxurious flowing of a pure stream of water at the door.

Few persons are aware of the great importance of a supply of running water, at the dwellings and stock yards, where cattle and other stock are confined in winter, unless they have enjoyed that privilege and afterwards been deprived of it.

I have often observed the want of this necessary element around the houses and yards of our farmers, while a stream was flowing, in the richest profusion, within a short distance, but unfortunately on a lower level; and as often have I wished to see some cheap and effective engine at work, making the babbling idle brook work to some good account, and pour the necessary share at the door—a libation to neatness and economy. Numberless instances, where incalculable inconvenience and privation have been endured, and the most prodigal waste of labor committed from generation to generation, from that physical and moral lathargy of character which too often leads us to drag on through life, neglecting expedients that the least thought would suggest, and the slightest exertion bring to our relief.

For years and years have we known large families to be supplied with all the water used, but not a hundredth part of what was actually needed, by keeping a person continually on the trot to a distant, and perhaps an unclean spring, bringing pails full at a time, when a constant supply of water from streams of the smallest volume, might with a very simple hydraulic contrivance be made to afford a constant flow at the door of the kitchen. the dairy and stock-yard.—For this purpose, the Hydraulic Ram, appears the most simple and economical contrivance yet discovered. A simple calculation of the remuneration to be derived from the saving of labor, and the money value, to say nothing of the luxury of a full supply of water, would convince them that a single year, some even less, would reimburse them. Then again it is to be considered, for example, as to the use of it for domestic animals, not only the time that is saved through the whole winter, especially in sending them to a distance to drink, but that they often suffer from not having a supply when nature demands. The saving of manure, too, is not to be overlooked.

Among all the devices or contrivances for conveying water from a lower to an upper level, nothing as yet has been discovered equal to the Hydraulic Ram. It is a very ingenious and effective machine for raising water by its own impulse, and comes nearer to a *perpetual motion* than any other machine that has ever fallen under my notice.

If a column or body of water, moving rapidly under a head, through a pipe, is suddenly checked, its tendency is to burst the pipe.

This is well known in all places where there are water works, from the bursting of the leaden supply pipes where these are not strong enough, on the sudden shutting off the hydrant cocks.—If a small hole is made in the pipe, just above the cock, the water will escape from it in a very high jet, much higher than the head, whenever the cock is shut. It is this principle which is brought into action in the Hydraulic Ram. If a small straight upwright pipe is attached to the hole, just mentioned, in the main pipe, having a valve shutting downwards, which will permit the water to pass upwards, but not to return, each opening and shutting of the cock will force up into the smaller pipe a quantity of water in proportion to the head upon the main pipe until the weight of the water in the smaller pipe is greater than can be moved by the *momentum* of the water in the main pipe, when the latter is suddenly closed.

Every person accustomed to draw water from pipes that are supplied from very elevated sources must have observed, when suddenly closed, a jar or tremor communicated to the pipes, and a snapping sound, like that from small blows of a hammer. These effects are produced by blows which the ends of the pipes receive from the water—the liquid particles in contact with the plug of a cock, when it is turned to stop the discharge, being forcibly driven up against it by those constituting the moving mass behind.

Waves of the sea act as water-rams against rocks or other barriers that impede their progress; and when their force is increased by storms of wind, the most solid structures give way before them.

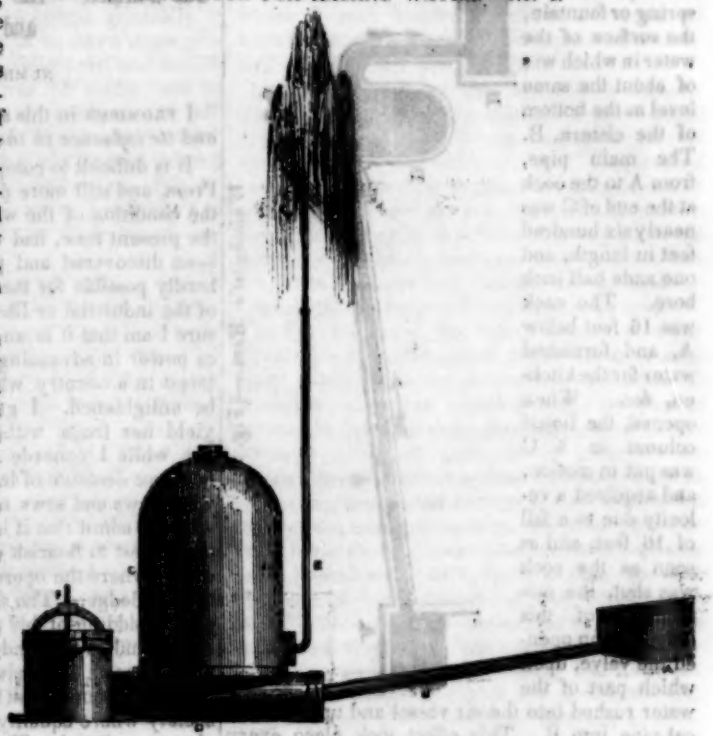
The increased force water acquires when its motion is accelerated, might be shown by a thousand examples. A bank or trough that easily retains it when at rest, or when slightly moved, is often insufficient when its velocity is greatly increased. When a deep lock of a canal is opened to transfer a boat or vessel to a lower level, the water is permitted to ascend by slow degrees. Were the gates opened at once, the rushing mass would sweep the gates before it, or the greater portion would be carried in the surge quite over them, and perhaps the vessel also. A sluggish stream drops almost perpendicularly over a precipice; but the momentum of a rapid one shoots it over, and leaves a wide space between. It is so with a stream issuing from a horizontal tube. If the liquid pass slowly through, it falls inertly at the orifice; but if its velocity be considerable the jet is carried to a distance ere it touches the ground.

That the force which a running stream thus acquired may be made to drive a portion of the liquid far above the source whence it flows, is obvious from several operations in nature.—

During a storm of wind, long swelling waves in the open sea alternately rise and fall, without the crests or tops of any being elevated much above those of the rest; but when they meet from opposite directions, or when their progress is suddenly arrested by the bow of a ship, by rocks, or other obstacles, part of the water is driven to great elevations.

The Hydraulic Ram raises water on precisely the same principles; a quantity of the liquid is set in motion through an inclined tube, and its escape from the lower orifice is made suddenly to cease, when the momentum of the moving mass drives up, like the waves, a portion of its own volume, to an elevation much higher than that from which it descended. This may be illustrated by an experiment familiar to most people. Suppose the lower orifice of a tube (where the upper one is connected to a reservoir of water) be closed with the finger, and a very minute stream be allowed to escape from it in an upward direction, the tiny jet would rise nearly to the surface of the reservoir. It could not of course ascend higher. But if the finger was then moved to one side, so as to allow a free escape, until the whole contents of the tube were rapidly moving to the exit, and the orifice then at once contracted or closed as before, the jet would dart far *above* the reservoir; for, in addition to the hydrostatic pressure which drove it up in the first instance, there would be a new force acting upon it, derived from the *momentum* of the water. As in the case of a hammer of a few pounds weight, when at rest on an anvil, it exerts a pressure on the latter with a force due to its weight only; but when in motion by the hand of the smith, it descends with a force that is equivalent to the pressure of perhaps a ton.

APPARATUS FOR RAISING WATER.—No. 1.



Birkinbine's Ram—(Fig. 1.)

At a hospital in Bristol, England, a plumber was employed to convey water through a leaden tube, from a cistern in one of the upper stories, to the kitchen below; and it happened that the lower end of the tube was burst nearly every time the cock was used. After several attempts to remedy the evil, it was determined to solder one end of the smaller pipe immediately behind the cock, and to carry the other end to as high a level as the water in the cistern. And now it was found that on shutting the cock, the pipe did not burst as before, but a jet of considerable height was forced from the upper end of this new pipe. It therefore became necessary to increase its height, to prevent water escaping from it; upon which it was continued to the top of the hospital, being twice the height of the supplying cistern; but then, to the great surprise of those who constructed the work, some water still issued. A cistern was therefore placed to receive this water which was found very convenient, since it was thus raised to the highest floors of the building, without any extra labor. Here circumstances led the workman to the construction of a water ram, without knowing that such a machine had been previously devised.

It is now more than fifty years since the first discovery was made known, and it has, until within a few years, been regarded more as a scientific toy, than of practical utility. It is a matter of surprise, too, that so beautiful a contrivance should have laid dormant and neglected, and scarcely known, except to the scientific.

The first person who is nown to have raised water by a ram, designed for the purpose, was Mr. Whitehurst, a watch-maker of Derby, in England. He erected a machine similar to the one represented by the next figure, in 1772.

Whitehurst's Ram.—(Fig. 2.)

A represents the spring or fountain, the surface of the water in which was of about the same level as the bottom of the cistern, B. The main pipe, from A to the cock at the end of C was nearly six hundred feet in length, and one anda half inch bore. The cock was 16 feet below A, and furnished water for the kitchen, &c. When opened, the liquid column in A C was put in motion, and acquired a velocity due to a fall of 16 feet, and as soon as the cock was shut, the momentum of this long column opened the valve, upon which part of the water rushed into the air vessel and up the vertical pipe into B. This effect took place every time the cock was used; and as water was drawn from it at short intervals, for household purposes, "from morning till night, all the days in the year," an abundance was raised into B, without any exertion or expense.

Such was the first water ram. As an original device, it is highly honorable to the sagacity and ingenuity of its author; and the introduction of an air-vessel, without which an apparatus of the kind could never be made durable, strengthens his claims to our regard. In this machine he has shown that the mere act of drawing water from long tubes, for ordinary purposes, may serve to raise a portion of their contents to a higher level; an object that does not appear to have been previously attempted, or even thought of. Notwithstanding the advantages derived from such an apparatus, under circumstances familiar to those indicated by the figure, it does not appear to have elicited the attention of engineers; nor does Whitehurst himself seem to have been aware of its adaptation as a substitute for forcing pumps, in locations where the water drawn from the cock was not required, or could not be used.

[*To be continued.*]

Taxes for the support of schools are like vapors, which rise only to descend again to beautify and fertilize the earth.

The Farmer.---His Position, Responsibilities, and Duties.

NUMBER NINE.

I promised in this article to speak of *the Press and its influence in the elevation of Agriculture.*

It is difficult to comprehend the power of the Press, and still more difficult to determine what the condition of the world would have been at the present time, had the art of printing never been discovered and perfected. It would seem hardly possible for the present advance in any of the industrial or liberal arts, without it—and sure I am that it is an indispensable ingredient or power in advancing and perfecting any interest in a country where the masses require to be enlightened. I grant that the earth would yield her fruits without books or newspapers; but while I concede that grain would grow, however destitute of learning or intelligence, he who plows and sows might be. I cannot for a moment admit that it is possible for any calling or interest to flourish or advance to any great extent where the operative is without the means of knowledge. The slave may toil, like the ox, at the bidding of his master, but all experience in this and every land proves that such labor is after all most expensive and least productive,—and it is of course not to be tolerated in a state of society where equality is aimed at, and caste and class repudiated. The intelligent, well-informed man, be he proprietor or laborer, can never be made a slave nor a serf. With the spread of intelligence is the advance of personal independence, and with knowledge comes manly pride, which will not brook or submit to slavish bondage or degrading servitude. Hence the importance, to a free people, of the Press, and of its freedom.

A moment's recurrence to the past is the best commentary which we can make on the power and importance of the art of printing. Since its invention and general application to the printing of books and newspapers, the advance of man in civilization has been truly wonderful. More has been accomplished within a century than for ages on ages before—greater advances in sciences and in all the arts, and greater improvements in every branch of trade and every department of life since the printing of books, newspapers, &c., than in all time before. And there is little doubt that type, with their impress on paper, has been one of the chief agents and instruments in this rapid march onward towards perfection.

But this art, like nearly every other, shed its light upon almost every other calling and profession before reaching that of Agriculture.—The sun's rays first strike the barren mountain top, before it reaches the rich and fertile valleys, and first glimmer amid the foilage of the trees

and shrubs ere it reaches and warms the earth—and so with knowledge; it seems generally to fasten first and thrive best in its dawn upon professions and interests less substantial and useful. But the sunshine must warm the vallies, and its light and heat fertilize the earth, ere it will yield its riches; and so intelligence and knowledge must reach the farmer, and spread among the laborers of the country, before the full advantage of their blessings can be realized, and their mighty influence felt in their length and breadth.

That farmer little values his calling, and is ignorant of the chief element for its improvement and progress, who treats lightly the Agricultural Publications of the Country. They are doing, to-day, more to elevate and advance his interest and secure him respect and influence than any one agent. They tread noiselessly over the land—they silently visit the firesides of the people—they speak words of wisdom to them in their hours of retirement, and whisper the results of experience to the tired husbandman in his moments of refreshment and rest. They are companions which the laborer can carry with him to the field and the forest, and they will speak to his heart and understanding when far away from society; they have a word for all seasons, and rules for all circumstances; they are good school-masters for children, as well as sage councillors for grown men; and no farmer should be without one or more in his family, and no laborer fail to read and study them.

Men may say they can learn nothing from Agricultural papers, and many doubtless honestly imagine it is time and money thrown away to take and read them; but how little do such men comprehend their own nature and character. It is a moral impossibility for a thinking, reasoning man—one who has a mind with memory attached to it—to read the GENESEE FARMER one year without advantage; that person must be low in the scale of intelligence, who would not be wiser and better fitted for his business from such a practice. Books are valuable, nay indispensable; but they are of little worth without the newspaper. The one is to be studied, and is invaluable in the library of the man of leisure, the scholar, the writer, and in the professor's laboratory; the other is for the millions to *read*, little by little—they are printed in a form and at intervals, just adapted for the masses, and they can be taken up at the dinner table and at the fireside, in the workshop or the barn, and read and reflected upon—and no truth is more sure than that they exercise a mighty influence on the public mind. Politics has been the great field for newspapers in this country, and the subject, as well as the Press, has been most foully abused in the course political discussions has too often taken. But there is a broader and better field where the printing Press may exert its power, without fear of evil, and where it may scatter broad-cast its seeds of knowledge, with a perfect assurance that they shall vegetate and produce fruit.

It is a cheering fact that Agriculture has, in almost every State, its distinct organ—while scarce a village paper but has its page or its column devoted to that noble calling. The last ten years has produced a wonderful change in this particular. There are ten Agricultural papers now published, where, fifteen years ago, one was issued; and what is more, each now printed has ten times more readers than the one did then.—I speak on this subject from personal knowledge. The Post Offices of the state will show a wider circulation of Agricultural papers than of any other class, with the exception of a few city weeklies. And this circulation of newspapers devoted to the subject of farming is rapidly increasing. Nothing more clearly evidences an increasing intelligence among farmers, than this fact. No enlightened farmer will be without his paper, and many men who ten years ago ridiculed the idea of "book farming," and Agricultural publications, now do not plow or sow or build without consulting that truest and best friend, his Agricultural paper. Prejudice is wearing away—intelligence is spreading far and wide—and slowly but surely the great interest upon which all others are based is rising up to its real dignity and importance.

The Press is the great agent in this progressive movement, and every farmer who loves his calling, and who respects his interests, should encourage and sustain the Agricultural publications of the State and Nation. He who will not do it is recreant to his truest interest, or has but a limited view of his duty to himself and his fellows. No man can plead poverty. In this land of health and plenty none can say "I am not able." The GENESEE FARMER costs, postage and all, but *four shillings a year*, and none are so poor as to be unable to raise that sum. But some may say, "I do not wish to read it; I can farm without a newspaper." That man must be very wise who cannot learn more than one, ten times over, who will not—who lacks not the ability, but the disposition. Well, my wise and unimprovable farmer, go on, and till your soil your own way. But you have a family—children who are growing up, and for their sakes subscribe for some approved Agricultural paper.—Do not shut them out from the means of improvement; do not dwarf their minds, by denying them light and knowledge. The cost is nothing; it may, it *will* do good, either to yourself or family. Let no householder be without a newspaper, and no farmer without one devoted exclusively to Agriculture.

Penn Yan, July, 1847. D. A. OGDEN.

WARM.—The Thermometer, to-day, (July 19,) at 2 P. M., stood at 96 degrees, in the shade.

Fences.

NUMBER THREE.

Mr. Editor:—I think I hear some of your readers exclaim, "Well, here comes the old pedlar again, astride the fence." Not so fast, my old covey—I am not straddle of the Fence any way you can fix it, either in Politics or Religion; on those two subjects I know where I sleep; but if I can get astride of some of the *miserable excuses* for good fences that I observe about the country, and can ride them down, I am content to be "straddle of the fence."

Now for a new variety, and a very clever and not very costly one. Procure posts of almost any kind, of the most desirable wood within your power—say chestnut, pine, white cedar, tamarac, &c., from 10 to 12 inches in diameter; mortice into the two opposite sides, five or six holes, 2 by 5 inches, at the proper distances; the rails should be 12 feet long and split as high like bars, or the old post and rail fence, as possible. Dress the ends to fit the mortice, and you are ready to commence putting up, which is done by setting one post and then fitting in the bars and standing up the next one till adjusted and firmly set, and so proceed till finished.

If sawed stuff is used, make the mortice of its width. The great advantage of this fence over the old post and rail, which it somewhat resembles, is the much greater sized posts that can be used, (size and durability are nearly concomitants,) and the cheapness with which they are prepared—as they are used in a state of nature as they come from the forest.

Another. Plant some fast growing tree, (I would prefer locust, were it not that it is liable to be destroyed by the borer, or Lombardy Poplar, Chestnut, Abeel or Silver Maple, &c.,) in every other corner of a worm fence on east and west roads, and on the south side of such roads to avoid shades; and when of about 6 inches in diameter, mortice into the tree as in the other fence, and spring in the bars. The annual growth will soon fasten them, and heal over faster than the ends of the bars will decay. When the trees are becoming unnecessarily tall, top and trim them to your fancy. These posts never ask "if salt petre will explode," and laugh to scorn salt, lime, and ashes, and other preventives of rot and dissolution, and may be used with great advantage in peculiar locations.

The only strong objection that I see to this "live hoosier" fence being used is, that whoever commences it must feel convinced that he will be the owner of the land eight or ten years.—Now, in this country, where the laws of primogeniture do not prevail, and property cannot be entailed, it is rare to find a farmer who is not ready and anxious to sell and start for the "big west;" in fact he has all but got his axe on his shoulder, ready to start for "Nova Zembla, or the Lord knows where," or some other *terra incognita*. We are such an uneasy, go a head, roving, unattached set of geniuses, that we know nothing of the feeling of attachment to family homesteads. We talk of the hardship of driving the poor Indian from the graves and bones of his fathers, but such kind of sentimental logic is all heathen Greek to the true Universal Yankee Nation.

Do we lack sympathy and that feeling of home and local attachment to the land that gave us birth; and family pride that distinguishes man from the lower migratory races? Oh that "almighty dollar," whose shining disc flashes on our diseased imaginations, and rolling on just ahead, puts quicksilver in our heels, to follow it almost to the very verge of space!

What a homily for a fence-maker!

Old Farmer Tim.

"Hedges and Fencing."

Mr. Editor:—I noticed in the May number of the Farmer, an article by Mr. Manly, entitled "Hedges and Fencing." With his opinions respecting the present and prospective scarcity of fencing material I fully coincide; and arguments might be adduced to prove that the agricultural products of many sections, *already* but half fenced, might be greatly augmented if fencing materials were sufficiently cheap, or plenteous, to enable farmers to divide their land in the best manner, to derive the advantages of a system of rotation. Want of fences produces want of system in farming—and, as in other business, where no system is practised, little success can be expected.

His remarks concerning hedges are also valuable, as being one more effort to call the attention of farmers to the importance of this mode of fencing, the only mode which man has ever invented which will bear practising on through an indefinite period of time. He is mistaken, however, in supposing that our indigenous thorns have never been tested to ascertain their fitness for fencing purposes. There are four species of native Hawthorn, (*Cratuegus*,) which abound principally in Western New-York. They are the *Cratuegus crus-galli*, (known to the eastern nurserymen as the New Castle, or Cockspur thorn,) *C. latifolia*, *C. coccinea*, and *C. punctata*.

The writer of this article has seen all the above species fairly and thoroughly tried, under the most favorable circumstances. The *C. crus-galli* is the best, and indeed seems the most admirably adapted by nature to forming an utterly impassable barrier of any thing yet discovered in the vegetable kingdom. The *C. latifolia* will make a fence, but it is not so good, not growing sufficiently thick at the bottom, and being liable to spread from the root, which the *crus-galli* never does; it also requires more pruning to keep it

in shape. The *coccinea* is not equal to the *latifolia*, and the *punctata* has proved nearly worthless for fencing purposes. The *coccinea* and *punctata* are the common thorns in this part of the country, and one can hardly ride a mile in any direction without seeing more or less of them, growing along fences and the road-side. The *latifolia* is more scarce, and the *crus-galli* quite rare—its scarcity probably owing to the difficulty with which its seeds vegetate.

As many may not be familiar with the latter species I will endeavor to describe it, so that it may be identified by any one. In the first place it is very late in leaf, ten days or two weeks later than the common kinds. Its leaves when full grown are from an inch to an inch and a half in length and about one-third as wide as long; obovate, or egg-shaped, with the stem attached to the narrowest end; serrated; rather a light green, smooth and shining, appearing as if varnished. Its thorns are unusually long, frequently three inches, very slim, very numerous, and extremely sharp. The berries, or haws, usually contain two seeds, but many of them contain one only, differing in this respect from any other native species. The branches of old trees frequently run along on the surface of the ground eight or ten feet, perfectly green and thrifty, and I have seen trees standing fifteen feet apart, whose branches were so interlocked down to the very ground, that no animal larger than a weasel could pass between them with a whole skin. The whole tree has a very flat and spreading appearance, old trees seldom being more than eight or ten feet high, but completely covering with their dense foliage and branches, an area of sixteen or eighteen feet in diameter.

Of all the *Cratuegus* tribe this species is the slowest to vegetatate, its seeds generally remaining in the ground two and a half, and three and a half years before they will sprout. In the Genesee Farmer for June, 1841, are directions for managing the seed, and I would merely add that cleaning the seed from the pulp will greatly facilitate germination. Like all Hawthorns, this species is liable to be injured by mice; and the best modes of obviating the difficuly are, to plant them on a small embankment, or keep the hedge clear of all that will harbor them. A more formidable enemy is the insect known as the apple borer, which has destroyed many hedges in other sections of the country, but has never injured them here as yet, and perhaps never may. If it should, the only alternative will be to adopt some other plant, and probably the best substitute will be found in the Buckthorn, (*Rhamnus cathartiem*,) for a description of which see Downing's Horticulturist, February number for the current year.

Yours, truly, A. H. Powers.

Ontario Co., May, 1847.

In freezing water expands nearly one-17th.

Agricultural Education.

"What profession are you preparing for?" This is a question often asked those who are attending academies or other institutions of learning aside from common schools,—as much as to say, "you have no business here, unless you intend to follow some of the so-called learned professions."

While attending an academy a few years since, (for the writer of this is not one of experience, but a young farmer,) I was frequently asked the above question, and was looked upon with unfeigned surprise when the reply was given "that of a Farmer." And almost invariably the following remark, or something similar, would be made in return. "Then why are you here spending your time and money in getting an education which will be useless to you amidst the toil and drudgery of the farm?" At that time a classmate and intimate friend was preparing for college, with the intention of studying law after graduating. We were equally advanced, occupied the same room, recited in the same classes, engaged in the same pastimes, and so far, were equally entitled to public patronage. After completing our academic course, he entered a college which is receiving a goodly sum from the state to aid in its support, is amply endowed with teachers, books and apparatus to enable him to prepare for the duties of his profession—while not an institution can be found that has for its object the study of the science of Agriculture. Thus, while my friend stands first in his class in college, I am compelled to obtain the little knowledge that I have of my occupation without teachers or libraries, and deprived of all public patronage whatever.

Can any one call this equal rights and no monopoly?—or shall we adhere to the old maxim, the greatest good of the greatest number, and establish and support Agricultural Schools for the benefit of the sons of farmers, whose influence shall give character to our District Schools?

June, 1847. Darius.

Remarks.—We thank "Darius" for the strong point which he has made in few words, and hope to hear from him again. The study of Agricultural Chemistry, Geology, Comparative Anatomy, and of Vegetable and Animal Physiology, will not always be denied to the sons of our farmers, except what they can teach themselves at home without a Museum, a Laboratory or instructors. Every day-laborer is furnished with tools to work with. How long shall we withhold the tools of the chemist from the hands that ache to use them?

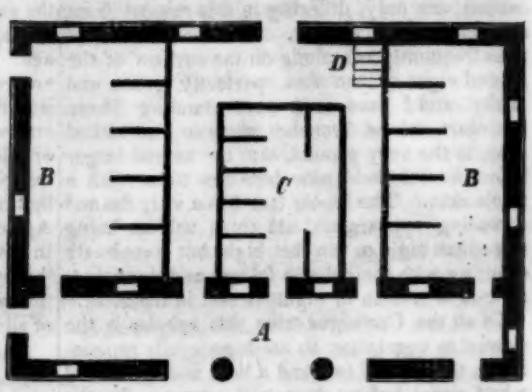
Interesting Chemical Fact.—Water saturated with one-third of its weight of common salt will still dissolve sugar; and if completely charged with carbonic acid, it will dissolve iron.

Description and Illustrations of a Pennsylvania Barn.

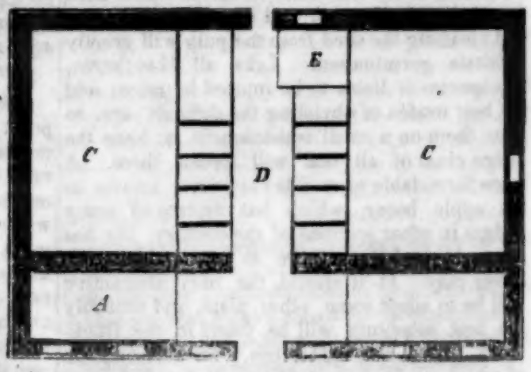
The high degree of perfection which agriculture has attained in Pennsylvania, compared with some other portions of the Union, has been commented upon by travellers from Europe as well as from every section of our country. Perhaps there is no particular feature which more distinctly indicates that perfection than the farm buildings—certainly there is nothing which more forcibly attracts the stranger's eye on entering within the bounds of that State, where he is at once assured that no niggardly regard to expenditure for useful purposes, influences a Pennsylvania farmer; though his own dwelling be of an unpretending character, the means for housing his crops and sheltering his flocks, are on an ample scale. Poor indeed would he judge that economy to be which permitted a sheaf to suffer injury for want of adequate protection.

Front Elevation.—(Fig. 40.)

The accompanying drawings illustrate a Barn of moderate size, but judicious construction, yielding as much advantage as it is possible to possess within the same space. Its dimensions are 60 by 40 feet, with an elevation of 30 feet to the eaves. It is on the estate of James P. Hutchinson, Esq., Montgomery county, nine miles from Philadelphia. The barn-yard is supplied with water by Montgolfier's hydraulic ram, from a reservoir 900 feet distant; the supply is 800 gallons per day; the dwelling house is also supplied by the same power, (2,000 gallons per day.) The elevation from the ram to the barn is 40 feet perpendicular height; these items are stated to show the great power of this simple and comparatively cheap invention. It is prepared by Mr. H. P. M. Birkinbine, of Philadelphia, to whom those interested can address themselves.



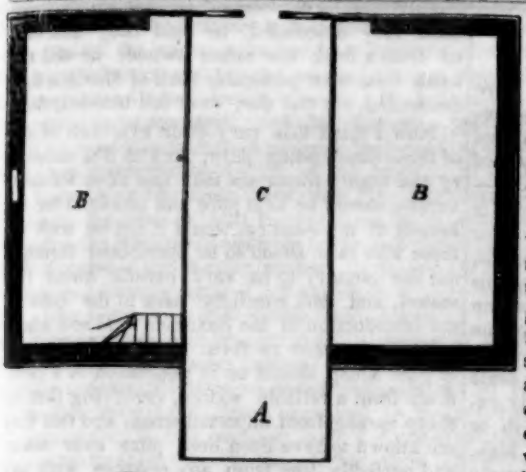
Ground, or Lower Floor.—(Fig. 41.)



Second Floor.—(Fig. 42.)

Fig. 40 exhibits a front view of the barn, the stable doors opening into the baan-yard, in which there is a constant stream of water from the ram. The yard, which is of sufficient space for cattle to take air in winter, and for other purposes, is flanked by sheds, &c., and substantially enclosed by a stone wall.

Fig. 41 represents the ground or lower floor; A, is the "overshot," 8 feet high; B, B, horse stables; C, cow stables, 7 stalls; D, stairway to upper floor. There are besides ample passages and elbow-room for feeding, &c. Figure 42 is a plan of the second floor; eight feet head-room; A, harness-room, eight by 20 feet; B, tool-room, eight by twenty feet;

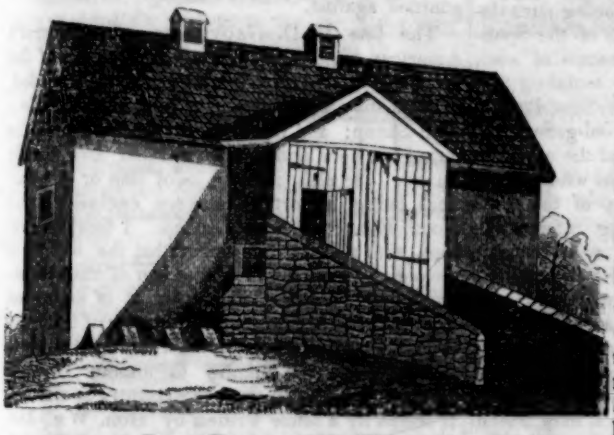


THIRD FLOOR.—(Fig. 43.)

C, C, hay-mows, each 20 by 26 feet; D, granary, divided into bins, with passage through the center; E, stairway.

Fig. 43 represents the third floor; A, is the wagon-way or entrance, as shown in fig. 44; B, B, upper part of the hay-mows (marked C C, on second floor;) C, threshing-floor, 47 by 15 feet 8 inches.

Fig. 44 is a rear view, showing the wagon-drive and entrance to what appears as the third story or floor, when viewing the building in front; it is reached by a gradual rise in the ground from front to rear, and by an artificial elevation of the soil as is shown in the passage between the abutments, so as to form a gradual ascent, easily surmounted by a heavily laden wagon; on the apex of the roof are 2 ventilators which serve a double purpose, admitting light and permitting the escape of foul air.



REAR ELEVATION.—(Fig. 44.)

The whole building is besides thoroughly ventilated by doors and windows suitably placed.—On the whole, we can safely commend this as an admirably constructed barn, and worthy of imitation. It will be perceived that by the arrangement adopted (now commonly followed,) the hay and grain, when unladen from the wagon, are cast down, rather than pitched upwards, an advantage of the greatest moment at a season when time and help are of double value. The hay and fodder reach the feeding floor by means of funnels or conductors, which carry it to convenient points. The harness-room, and tool-room, should be on the first floor, the space occupied by them on the second, would be serviceable for other purposes. A natural inquiry presents itself, the cost? That must of course depend on the expense of materials, the price of labor, and the proportion of work by hauling, quarrying stone, hewing timber, &c., which the proprietor himself may be able to perform; also the kind of material for the superstructure, whether it be wood, stone, or brick. In view of all these circumstances, it is inexpedient to attempt a statement; the prudent farmer will obtain estimates of all particulars, carefully prepared by responsible mechanics, and any estimate of ours might tend rather to his injury than benefit. The barn of Mr. Hutchinson is of stone, rough-cast; one of less cost (and in one respect better, because dryer,) would be of frame, on a basement of stone extending to the floor of the second story.—*American Agriculturist.*

A New Term.---Stercology.

MR. EDITOR.—I wish to propose, through your paper, a new *term*, which I think will supply a deficiency in agricultural language. We have no generic term which embraces in its signification, the science or art of enriching the soil. I, therefore, propose the term STERCOLOGY, which is compounded from the word *stercus*, which means manure or dung, and *logos*, a discourse. Although hardly general enough in its strict meaning, this word may, by a little extension, be understood to embrace everything under the head of manuring, enriching, ameliorating or amending the soil. And although words are only the signs of ideas, and technical language should not be used unnecessarily,—still a systematic division of any branch of science into *parts*, embraced under generic heads, is always convenient.

Yours,

M. M. RODGERS.

Rochester, June, 1847.

Merino Sheep.

Mr. Editor.—Blacklock tells us that there cannot be a more certain sign of rapid advances being made among a people in civilization and prosperity, than when increasing attention is paid to the raising and improvement of live stock,—and as this invaluable variety (the Merino,) is fast taking the place of the coarser, lighter fleeced, and consequently less hardy animals, and as the Mountain State, so celebrated for this variety, seems to attract the greatest attention for a supply, it may not be out of place for me to say that I have at different times visited various portions of that State, and have seen some flocks of Merino sheep that I think are truly excellent. The most that I have seen are in or near Addison County. They are valued high, especially so where they have been properly bred and where the owners can produce unquestionable evidence of their sheep being pure descendants of the early importations of the Spanish Merino. Possibly, in the absence of such evidence, a picture, or some high sounding title may be substituted sometimes; perhaps Paular, in some instances. But as the wool-grower requires the purity of the blood and the merit in the animal, I would suggest to those who wish to purchase and who think the purity of the blood essential, the propriety of getting information respecting pedigree from some very reliable source. That there are pure bred Merino sheep there, in the hands of different men, I suppose no one will doubt; but that there are very many that are not such, but are high grades, I have every reason to believe. Now I will not call names, nor do I wish to reflect upon any particular flock unfavorably, but merely state, as it may benefit others, that I have been in that vicinity at different times for the only purpose of obtaining Merino sheep that were thorough bred beyond a doubt, and I think with success. It have taken much pains, in different places, to examine flocks and converse with individuals, and am satisfied that some owners of flocks may and probably do think their flocks are purely Merino, but have no good evidence of that fact. I called on one who favored me with an examination of his sheep, and after selecting a favorite animal, for which he asked me forty dollars, I asked him if he was a pure Merino. He answered, that he was as pure as any; he said he was a certain man's kind of sheep. Of another I inquired respecting a certain flock of sheep, some of which he had himself become the owner, which he called full blooded. I told him that the purity of their blood was questioned; his reply was that when he purchased them for full bloods and received a certificate of their blood it was sufficient, and if there should happen to be anything wrong about it he was not to blame. Another said his were full blooded; but on inquiring from what flock they descended, he said they descended from a flock his father owned; he did not know from what particular flock of Merinos they descended, but that they were full blooded, &c.

Now I think this very poor evidence of any of these sheep being pure; and as it is necessary and highly important that this most valuable variety should be kept pure and unmixed for the benefit of the country, would it not be well for those who raise sheep to be distributed throughout the country to be very careful about this matter, and look carefully back to the time of the introduction of the Saxonies and see whose hands they were in then. I think the breeder of pure sheep should be in possession of a certificate from a reliable source, certifying that his sheep sprang from imported stock, and that they are known to have been bred pure ever since, and perfectly free from any mixture with any other variety; otherwise how can imposition be guarded against.

The late H. D. Grove says, (in Morrel's American Shepherd,) that a large portion of the imported Saxon sheep were not pure blooded, but that they were all sold as pure blooded Electoral Sheep; and that thus unfortunately in the outset the pure and impure became irrevocably mixed. He also informs us of one or two cargoes being imported that were exclusively full blood Electoral Saxon sheep. I think, therefore, with all due deference, that the owner of the sheep should be in possession of unquestionable evidence of the fact. I know of no reason why sufficient evidence of the purity of the blood of animals is not as essential when sending them from one part of a country to another, as it is when sending them from one country to another. It seems by a letter written by Hon. Wm. Jarvis, to the editor of the Watchman and Journal, on the subject of importing Merino sheep, that he deems it highly essential. When importing he says no sensible man would ship animals to another country for breed, without a certificate of the purity of their blood; also the port from whence exported; the name of the vessel in which exported; the captain's name; at what port in the United States they arrived; the time, and a certificate from a proper officer of that Government, officially verified by an American Consul, that they were pure blooded. And who would suppose that any man in Vermont would go to the expense of purchasing these sheep of Consul Jarvis, or any other man known to have them, without a certificate attesting their blood that cannot be questioned. If purchasers would be very particular respecting this I think it might often protect them from imposition. Let the pure blood stand on its own merits, and also the grade; let the purchaser get what he pays for, and I think he will be better pleased than when he pays for a full blood without being sure that he gets it.

It is the opinion of those with whom I have conversed on the subject, (that had the best means of getting information,) that the number of pure Merinos in the United States is small. Such I understand to be the opinion of Mr. JARVIS.—But if we take into the count all those flocks that have been improved by the use of the Merino, so as to be more like them than they are like any other, the number will be very much increased,—for Blacklock seems to think that the greatest value of the Merino consists in its giving rise to a variety equal if not superior to itself. The improvement of the sheep in Saxony has, it appears, all been brought about by the use of the Merino; and history informs us that even there the purest Merinos produced both finer fleeces and more wool those engrafted on the common stock of that country; and the same history informs us (the American Shepherd,) that when they were being sent to this country, the German newspapers teemed with advertisements of sheep for sale, good for the American market, and that they were purchased in sufficient numbers for a cargo, at prices varying from one-fourth to one-eighth the price that full blood sheep would cost, together, sometimes, with a few full bloods to make a flourish on.—Sometimes a cargo was selected altogether from grade flocks of low character, some hardly half blooded, and represented as being of most miserable character.

Thus we see imposition has been practised on the country to a great extent, and to its great injury, and it has also prejudiced the minds of some against the acknowledged foundation of all improvement of the fleece, both in the United States and in Europe. The real Merino, the fineness, compactness, length, and beauty of whose fleece, when properly bred, is rarely if ever equalled—they are also constituted hardy and well adapted to our climate. Thus we see that impositions have been practised upon the country with apparent ease; and I think, therefore, that there can be no harm in having an eye to this matter, that, whether impositions have or have not been practised in the sale of Merinos, they may not be hereafter.

Lysander, N. Y., 1847. J. L. RANDALL.

REMARKS.—The suggestions of Mr. RANDALL are worthy of attention. No one should purchase fine-wooled sheep, for the purpose of breeding, without good evidence of their purity. Proper caution ought always to be exercised in making selections and purchases.

Comparative weight of Fleece and Carcass.

MR. EDITOR:—My attention was some time since called to an article in your paper, signed by SOLOMON HITCHCOCK, in relation to Saxon and Merino Sheep. The writer contends—first, that sheep consume food in proportion to their own weight; and, second, that they produce clean wool about in proportion of one pound to from 18 to 19 lbs. of carcase. The former is undoubtedly correct—the latter may be, as a general rule, but I think by increasing the length of wool the weight of the fleece may be increased in proportion to the weight of carcase, without decreasing the quality. I this year weighed my sheep as they were shorn, and found they varied from 1 pound of wool to 8 lbs. 5 oz. of carcase, to 1 to 28. My yearling ewes averaged 1 to 13¼—yearling bucks, 1 to 16½—yearling wethers, 1 to 16¼; these were about 13 months old. My 2 years old buck, 1 to 14—2 year old wethers, 1 to 17⅝. Fat sheep, 1 to 17½—breeding ewes, 1 to 18½. The whole flock, consisting of 176, averaged 1 pound of wool to little short of 17 pounds of carcase. This wool was well washed, free from gum, and nearly so from oil; the purchaser thought it would not waste more than 15 to 20 per cent. by scouring.

The sheep that sheared the most in proportion to its weight, was a yearling ewe weighing 40¼ lbs., and yielding 4 lbs. 14 oz. of wool, about 4½ inches in length. Another weighed 50¼ and sheared 4¼ lbs., making 1 to about 10⅞—a sample of which you will find enclosed. My yearling ewes were the lightest sheep, averaging only 46 pounds, and had the finest and longest wool, except my bucks, of any that I sheared.

Victor, June, 1847. W. D. DICKINSON.

WE thank Mr. D. for his valuable communication. It is brief but to the point, and worth more than half a dozen pages of theory upon the subject.

Early Sowing of Wheat.

MR. EDITOR.—I sowed nine acres on the 5th of September last, after plowing four times.—The soil was good, and worked very fine; in consequence the wheat grew very large in the fall. The ground being wet I did not feed it off until the ground froze; then I turned on horses, cows and sheep, but it was too late—it had got into spindle and the frost killed it, so that it will not pay for harvesting.

One of my neighbors has twelve acres nearly as bad as my own. He sowed the first of September. I think farmers frequently sow too early.

If you think this worthy a place in your Journal, please insert it. A. D. MARVIN.

Cambria Centre, June, 1847.

REMARKS.—Our readers will recollect that we particularly alluded to the impropriety of sowing wheat early in September, last autumn. Mr. SHEPPER, of Wheatland, informs us that the field in which the insects worked last fall, (some account of which we gave in the Farmer,) has been wholly destroyed by them and the frost. This was an early sown piece on the Genesee flats.—ED.

Hints for August.

Haying and harvesting now being about closed, except oats and peas, look well to your summer fallows; let them be thoroughly harrowed and plowed. Composts and well rotted manures may be sparingly applied. Plaster only benefits wheat by being plowed or dragged in before seeding.

Do not sow your wheat before the 10th nor later than the 20th September, if you can avoid it, except to follow corn and potatoes. Never sow a bushel without brining and limeing; it is infallable against smut, and beneficial to the young plant.

Cut brush and shrubs about the middle of this month, and but few species will survive the next year. Scrub oak, elders, briars, and a few others, are exceptions. Canada thistles should be cut when in full blossom. A few years' mowing, when in meadow land, extirpates them.

Set out strawberry runners early this month, for next year's bearing; water well and see that they get a good start. The soil should be deep and rich. Grapes should be now summer pruned. Cut away the vines upon which are clusters, one or two leaves beyond the fruit if they are shaded, and young suckers that are in the way may be pruned off or deleaved to give the fruit sun and air.

The latter part of this month, and as long in September as the bark will slip, is the period for budding. Insert the bud as near the ground as possible in small trees; they are much surer to survive the winter, and make better stocks.

Look to your potatoe vines and see if the leaf curls; if so, next observe the stalk an inch or two above the soil; if it is discolored and soft you have got the *Rot*. The story of insects being the cause is all humbug; the worm in the pith of the stalk is as old as the cultivation of the potato,—and what is fatal to that theory is, that the tuber is not affected particularly in those containing the worm.

Experiment in Making Pork.

Mr. Editor.—Some months since I promised several gentlemen, and among them the publisher of the Genesee Farmer, a statement for publication of an experiment that I made last fall in making pork. But you have been so overrun with cammunications for the Farmer, from month to month, that I have felt unwilling to trouble you with it. However I will give you the statement, and you may dispose of it as you please. I do not make it thinking that there is anything extraordinary in the experiment or the end attained. There was no more done than any man can do with good hogs, good grain, and good care.

On the 31st of last October, I put into the pen three hogs, which weighed on that day as follows:—

No. 1—18 months old.		274 lbs.
No. 2—17 "	"	227 "
No. 3—16 "	"	196 " —697 lbs.

They were fed on barley 48 days, and on corn 48 days—making 96 days that they were fattening. They were butchered on the 18th of January. They then weighed, alive, as follows:—

No. 1—	572 lbs.—	Gained 298 lbs.
No. 2—	464 "	" 237 "
No. 3—	363 "	" 167 "
Total weight	1399 "	Total gain 702 "

They weighed dressed:—

No. 1—	468 lbs.
No. 2—	387 "
No. 3—	300 " —1155 lbs.
They consumed in the 96 days	1641 lbs. barley meal.
and	1630 " corn & cob meal.
Total of corn and barley	3271 "

The gain in live weight was 702 lbs., which gave a pound gain in live weight for a fraction over every 4½ lbs. of grain consumed.

There was nothing fed these hogs besides the grain mentioned, except water, and salt enough to season it well. This feed was all boiled from 6 to 12 hours; the barley was all ground, and a part of the corn. Grinding the corn I consider a dead loss, for I think it equally as good without grinding, provided it is cooked long enough, and it is no more labor to cook it whole than ground, with proper conveniences. Cooking barley without grinding I never tried, but think it would be equally as good as ground. These hogs had run in the pasture through the summer up to harvest time, and then were turned into the wheat stubbles and fed nothing else of consequence.

By turning to the 127th page of the last volume of the Farmer, you will find the result of two experiments in pork making; one in which they estimate the gain in live weight to be 1 lb. for every 10¼ lbs. of grain consumed; in the other they estimate the gain in live weight to be 1 lb. for every 9½ lbs. of grain consumed. This I should think a small gain, even for uncooked feed.

Yours, &c.,

B. Densmore.

Kendall, N. Y., July, 1847.

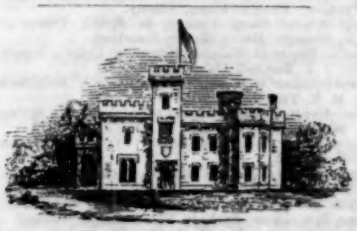
Remarks.—Mr. Densmore deserves the thanks of the whole farming community for his highly interesting and instructive experiment. The cases referred to in the Farmer were experiments made in France by M. Boussingault, and doubtless state the facts as they occurred. But no one, two or three single experiments, made with different herds of swine and under different circumstances can be safely regarded as settling the question how many pounds of corn, barley or other grain are required to make a pound of good pork. We commend the experiment of Mr. D. to the imitation of others.

Soils and Timber.

I HAVE remarked that a lime on flinty soil is most congenial for winter wheat. I wish to ask some of the correspondents of the Genesee Farmer to state the reasons why a hemlock soil will not also produce winter wheat, as well as spring grain? Or I will ask why the natural timber in some places is beech, maple and hemlock, while in others beech and maple?—and again in others, handsomely sprinkled with oak and whitewood,—again, pine and oak,—and again, all oak, even in the same town? Also, the most profitable agricultural products the farmer may cultivate on these various soils?

Yours, &c., WM. BROWN.

East Pembroke, N. Y., 1847.



Hall at Wyoming.

THE above cut represents the front elevation of a dwelling, in the castellated style, to be erected the ensuing summer at Wyoming, near Boston. It measures 75 by 36 feet. The walls are rough stone, and the flat roof is covered with bricks, one inch thick, laid in cement. The gothic doorway opens into a hall 32 by 10 feet. On the left of the hall is a drawing-room 32 by 22 feet, 16 feet high. On the right, are a library, dining-room, and two bed rooms; above are eight spacious bed-rooms. The location of this mansion is well adapted to the style of its architecture, being on high ground, fronting a lawn of five acres in extent, and overlooking one of the most beautiful lakes in New England.

Wyoming is seven miles north of Boston, and was about a year since laid out in lots for ornamental cottages and villas. It comprehends a great variety of scenery—hill, dale, open lawn, dense forest, extensive lake, murmuring brooks, and cascades rushing down romantic glens—well deserving a name so immortalized by the poet Campbell.

The building now presented to the notice of our readers was designed by William Bailey Long, author of "Views of Highland Cottages," which work is for sale at the store of Messrs. Clark and Austin, No. 205 Broadway, New York. *Amer. Agriculturist.*

THE WHEAT CROP, in Western New York, yields much better than was anticipated. The weather, for three or four weeks past, has been very favorable for wheat.

Agricultural Fairs for 1847.

N. Y. STATE AG. SOCIETY.—The next Annual Exhibition of this Society will be held at SARATOGA SPRINGS, on the 14th, 15th, and 16th days of September next. Hon. SILAS WRIGHT is to deliver the Address. [For list of Judges, and other information, see page 194.]

☞ Those who intend to compete for premiums should remember that all animals and articles must be ready for examination on the *first day* of the Exhibition—that is, on *Tuesday, the fourteenth of September*. The first day will be devoted exclusively to the examination by the judges of the animals and articles exhibited, and no persons will be admitted within the enclosure on that day, except the officers of the society, judges, and exhibitors.

ERIE COUNTY.—The Fair is to be held at Buffalo, on the 22d and 23d days of September. Address by O. ALLEN, Esq., President of the Society. We notice that there are seventeen classes of premiums offered by this Society, embracing all descriptions of live stock, field crops, dairy produce, implements, fruits, &c.

SENECA COUNTY.—The Annual Fair is to be held at Ovid, on the 14th and 15th of October. We are indebted to the President, J. DELAFIELD, Esq., for a pamphlet containing the list of premiums, which are numerous and liberal.

YATES COUNTY.—Annual Fair to be held in Pen Yan on the 1st of October. The list of premiums is very extensive, embracing all branches of agriculture, horticulture, &c.—The Address will be delivered by Dr. DANIEL LEE, Editor Genesee Farmer.

ONEIDA COUNTY.—The 7th Annual Fair and Show of this Society is to be held at New Hartford, on the 23d and 24th of September next. The Secretary, JAMES REES, Esq., has favored us with a pamphlet containing rules, premium list, &c. The list is extensive and liberal.

WYOMING COUNTY.—The Show and Fair is to be held at Warsaw, September 29th and 30th. We have not received the premium list.

JEFFERSON COUNTY.—The Annual Fair is to be held at Watertown, September 9th and 10th. Address by Dr. DANIEL LEE.

CAYUGA COUNTY.—The Annual Fair will be held at Auburn, on the 6th and 7th days of October next. The address is to be delivered by B. P. JOHNSON, Esq., on the first day of the exhibition.

GENESEE COUNTY.—The eighth annual Show and Fair is appointed to be held at Stafford, October 7th and 8th.—The Society has offered premiums amounting to upwards of $500, on 250 enumerated articles.

ONTARIO COUNTY.—We are indebted to OLIVER PHELPS, Esq., for a copy of the Premium List, &c., for 1847. The Cattle Show and Fair is to be held at Canandaigua, on the 12th and 13th days of October. As usual the premiums are liberal and extensive. No speaker yet selected.

LIVINGSTON COUNTY.—The Annual Fair (and Meeting for the election of Officers,) is to be held at Geneseo, on the 28th of September. The Secretary, B. F. ANGEL, Esq., has our thanks for a copy of the Premium List, &c.

ORLEANS COUNTY.—The Society is to hold its next Fair at Albion, on Thursday and Friday, Sept. 30th and Oct. 1st. ARAD THOMAS, Esq., of Albion, has been designated to deliver the annual address. For these particulars we are indebted to H. J. SICKLES, Esq., P. M. at Albion.

SARATOGA COUNTY.—Show to be held at the village of Ballston Spa, on the 8th of September next.

☞ The Societies in Monroe, Onondaga and Wayne counties have not yet designated the time, &c., of holding their Exhibitions. From other counties we have no information. Secretaries of the Societies not mentioned above will oblige us by forwarding Premium Lists, &c., as early as practicable. M.

FAIRS IN OTHER STATES AND CANADA.

CALEDONIA COUNTY, VT.—Fair to be held at St. Johnsbury Plain, October 7th.

RUTLAND COUNTY, VT.—The Exhibition will be held at Rutland, on the 29th and 30th of September.

WORCESTER COUNTY, MASS.—This Society holds its annual Exhibition on the 23d of September next, at Worcester.

CANADA WEST.—The *Provincial Agriculturel Association* is to hold its next Exhibition in the City of Hamilton, on the 6th and 7th days of October.

New York State Agricultural Society.

At a meeting of the Executive Committee, at the Agricultural Rooms, July 8th, 1847—present, Geo. Vail, President; C. N. Bement, Vice President; A. D. McIntyre, Treasurer; B. P. Johnson, Secretary.

Letters were read from Hon. Edmund Burke, Com. Patents; P. L. Simmonds, London, corresponding member of the Society; J. B. Dill, Secretary Cayuga Agricultural Society; Aaron Clement, Sec'y Philadelphia Ag. Society; D. D. T. Moore, Publisher Genesee Farmer; Hon. Adam Ferguson, Canada West; M. B. Bateham, Editor Ohio Cultivator; James Rees, Sec'y Oneida Ag. Society; B. F. Angel, Sec'y Livingston Co. Ag. Society, with an interesting account of the annual plowing match, held on the 29th of May; J. Delafield, President Seneca Ag. Society, with an account of the systematic effort making to arouse the farmers to a more thorough course of farming; and from several gentlemen who had been appointed as judges for the approaching fair.

The President exhibited some very large and fine specimens of Quartz, taken from his farm near Troy, which were referred to Prof. Hall, for examination, &c.

Col. Sherwood, late president of the Society, having become overstocked, offers for sale at his residence in Auburn, on the 8th of September next, his choice herd of Short Horns. The original cows of Col. S. were selected from the herds of the late Patroon, Francis Rotch, Esq., of Butternuts, and L. F. Allen, of Black Rock. An opportunity like the present to select choice animals, it is not probable will soon occur. The sale is to be without reserve. Pedigrees of the animals can be had on application to the Secretary at the Agricultural Rooms, Albany. The committee would specially invite the attention of Breeders and Farmers to this sale of valuable stock.

The committee appointed on the removal of the remains of the late Judge Buel, reported, That they had waited upon the family of the deceased, and presented the request of the Society; and were informed that they highly appreciated this testimony of respect to their esteemed relative, but declined at present to have the remains removed to the Cemetery.

The President reported that he had, with the Secretary, visited Saratoga Springs during the past week, and was happy to inform the committee that the citizens of Saratoga have organized their committees as requested by the Executive Committee at their last meeting; and that they are making arrangements for the erection of buildings and enclosing the grounds. Assurances were given that every thing required would be in readiness for the approaching Fair of the Society.

The Secretary reported that he had, in pursuance of the directions of the Executive Committee, corresponded with the officers of the Railroad companies, and that the usual facilities would be furnished to the Society at the Fair. Articles and stock for exhibition to be transported free.—Visitors in special trains, at half the usual fare. Officers of the Society to be carried to and from the Fair in any of the trains at the same rates.

Washington's Agricultural Correspondence, edited by Franklin Knight, was presented to the committee for examination, and they esteem it a very valuable work, and one desirable to be adopted as one of the works to be awarded as premiums. They could recommend it to the favorable notice of the officers of the County Agricultural Societies for premiums.

DONATIONS

For the library of the Society have been received—

From the Philadelphia Society for the promotion of Agriculture, 5 volumes of their Transactions.

From W. H. Starr, proprietor N. Y. Farmer and Mechanic, 4 bound volumes, and the volume of 1847, as far as published.

From Hon. E. Burke, commissioner of patents, 4 copies of the Patent Office Report for 1846.

From S. H. Terry, secretary of Rensselaer Ag. Society, several copies of the Transactions of the society for 1846.

From James Rees, secretary Oneida Ag. Society, pamphlet containing constitution, regulations, premiums, and committees for 1847.

From Franklin Knight, New York, Washington's Agricultural Correspondence.

Thanks were tendered to the respective donors.

JUDGES FOR THE FAIR.

The vacancies in the list, which was made at the last meeting of the board, were supplied, and the secretary directed to prepare the same with directions, &c., in pamphlet form. The Judges are as follows:

On Durham Cattle.—Effingham Lawrence, Flushing, Long Island; Henry Holmes, Washington; Thomas Hollis, Otsego.

On Herefords, Devons, and Ayrshires.—Lemuel Hurlbert, Winchester, Conn.; Fred. Ingersoll, Oneida; Thos. Bell, Westchester.

Cross-improved and Native—Richard Griswold, Lyme, Conn.; Wm. Fuller, Skaneateles; John Budd, Greene co.

Working Oxen—Sanford Howard, Albany; Joseph Bennett, Otsego; Hiram Clift, Onondaga.

Steers—John Boice, Homer; J. R. Dill, Auburn; Julius Curtis, Oneida.

Fat Cattle—Hiram Slocum, Troy; Thomas Devoe, New York; Lester Barker, Oneida.

Milch Cows—Newbury Bronson, Wyoming; John Rathbone, Morrisania; Elias Cost, Ontario.

Horses, Class 1 and 2—Hon. Adam Fergusson, Canada West; Theodore S. Faxton, Oneida; A. M. Clarke, Jefferson.

Blood Horses—Charles Henry Hall, Harlem; John T. Cooper, Albany; Alexander O. Spencer, Wayne.

Matched Horses and Geldings—Silas K. Stow, Troy; W. S. Stoutenbergh, Coxsackie; Barent P. Staats, Albany.

Long Wooled Sheep—Edward Halleck, Ulster county; L. D. Clift, Putnam; Thomas Dunn, Albany.

Middle Wooled Sheep—Francis M. Rotch, Otsego county; S. Wait, jr., Orange; Henry Mesier, Dutchess.

Merinos—Henry G. Tainter, Hampton, Conn.; Robert L. Ross, Ontario; J. L. Randall, Onondaga.

Saxons—James M. Ellis, Onondaga; S. C. Scoville, Salisbury, Conn.; M. Y. Tilden, Columbia.

Swine—Henry Rhodes, Oneida county; Martin Springer, Rensselaer; Wm. Howard, Cayuga.

Poultry—H. A. Field, New York; F. C. Moses, Onondaga; Mr. Potter, New York.

Plows—John S. Gould, Columbia county; Edwin N. Hubbell, Greene; Morgan L. Brainard, Oneida.

Wagons, Harrows, &c.—W. H. McCulloch, Greenbush; Mathias P. Coons, Rensselaer; Richard Van Dyke, jr., Greene.

Farm Implements, &c.—T. A. Burrall, Ontario county; Benj. N. Huntington, Oneida; Hart Massey, Jefferson.

Plowing Match—John McDonald, Washington county; Isaac Tallmadge, Rensselaer; Joseph Ball, Otsego; Leonard Bronk, Greene; Hiram Mills, Lewis.

Butter—Israel Denio, Oneida county; Washington Putnam, Saratoga; John Bloom, Albany.

Cheese—Joseph Carey, Albany; Joel Woodworth, Jefferson; Joel Bent, Saratoga.

Sugar—Robert McDonnell, Saratoga; George Tuckerman, Otsego; James M. Cook, Ballston Spa.

Silk—Ebenezer Proudfit, Rensselaer; James Clark, Union; Henry Carpenter, Albany.

Domestic Manufactures—Orville Hungerford, Jefferson; Le Grand B. Cannon, Rensselaer; W. J. Gilchrist, Saratoga; Edward Wells, Montgomery; John Van Duzen, jr., Columbia.

Needle-Work, &c.—Mrs. Libbeus Booth, Ballston; Mrs. Miles Beach, Saratoga Springs; Mrs. M. Harvey, Salem; Mrs. Henry Holmes, Union Village; Mrs. Wm. A. Beach, Saratoga Springs; Mrs. Samuel Young, Ballston. John J. Viele, Troy, sec'y to com.

Flowers—Dr. Herman Wendell, Albany; W. R. Randall, Cortland; J. W. Bissell, Monroe; Jas. R. Westcott, Saratoga. *Ladies*—Mrs. E. C. Delavan, Ballston; Mrs. E. Huntington, Rome; Mrs. Hunteman, Flushing; Mrs. Dr. O'Toole, Washington, D. C.; Mrs. L. Tucker, Albany; Miss Margaret Conkling, Melrose, near Auburn.

Vegetables—Thomas Bridgman, New York; R. Harper, Albany; David Gray, Utica.

Miscellaneous Articles—E. P. Prentice, Albany; Joshua Atwater, Greene; Ransom Cook, Saratoga.

Fruits—Lewis F. Allen, Erie; Samuel Young, Saratoga; Roswell Reed, Greene.

Paintings and Drawings—J. J. Thomas, Wayne; W. W. Forsyth, Albany; O. D. Grosvenor, Oneida.

Stoves, &c.—Pomeroy Jones, Oneida; Edward Fitch, Saratoga; Asa Fitch, M. D., Washington.

Discretionary—Orville Clark, Washington; Joel Rathbone, Albany; W. L. F. Warren, Saratoga; A. L. Linn, Schenectady; George Griffing, Greene.

Foreign Stock.—*Horses*—James D. Wasson, Albany; Eli Merriam, Lewis; Dr. Carrington, Farmington, Conn.

Cattle—Horatio Sargeant, Springfield, Mass.; Ira S. Hitchcock, Oneida; E. P. Beck, Wyoming.

Sheep—Stephen Batty, Washington county; John Murdock, Monroe; Samuel H. Church, Oneida.

COMMITTEE OF ARRANGEMENTS.

Geo. Vail, Troy; B. P. Johnson, Albany; T. J. Marvin, W. A. Beach, J. T. Blanchard, J. A. Corey, Saratoga Springs; Samuel Cheever, Bemis Heights.

COMMITTEE OF RECEPTION.

Hon. R. H. Walworth, Saratoga; Samuel Young, Ballston; John A. King, Jamaica; E. C. Delavan, Ballston; T. J. Marvin, J. A. Corey, G. M. Davison, Saratoga.

B. P. JOHNSON, *Secretary.*

☞ The proprietors of the Hotels, &c., at Saratoga, have agreed to charge ONLY their usual rates for board during the State Fair—from 75 cents to $2,50 per day.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

[The Editor of this Department has been absent during most of the past month, on an excursion to some of the Western States and Territories. He has forwarded us the following Notes by the way, thinking they might prove interesting in the absence of other matter.—Pub.]

Horticulture in the West.

Thirty years seem but a day in the history of a Nation's existence, and in old countries brings about so little change on the face of things as scarcely attracts our notice; but not so in America. Here, in the West, I find large, beautiful, and populous towns and cities, with tasteful dwellings, fine gardens, and all the accompaniments of civilization and refinement, on the very spot where 30 years ago stood the forest. To those who have not *seen*, the fact is almost beyond belief. A glance at the Western States is what I have long desired. Their vastness, rapid settlement, great lakes and rivers—cities of almost magic growth—noble trees, and beautiful wild flowers, that we had never met in their "native haunts," have all been pictured in my imagination as long back as I can remember—and with as much anxiety have I longed to see them, as did the ancients to enter "the promised land," that flowed with milk and honey.—How many thousands of the overgrown population of the old world, and how many of the hardy sons of the older states of the new, have bid adieu to their homes and friends and directed their course thither, with such notions of the west as I have had, would be hard to tell. And never did they come faster or thicker than at present. Every boat that comes up the lakes bears a multitude of emigrants, joyously journeying to their "land of promise"—there to make for themselves new homes, and to convert, by their industry, these forests, valleys, and prairies into fields of grain, orchards, and gardens, for the sustenance of men. In other words, "to make the desert blossom as a rose." All that's wanted here is *industry, intelligently directed.*

It is unnecessary to say that, as far as I have travelled, I have been delighted—for who could fail, in such a country, and at such a season.—But I have seen little. It is not a month but six months, nay a year, that one would require to see the West as I wish to see it. Passing along in a stage or a rail-road, as I have done, is but a mockery; just when we wish to pick a flower, explore a forest of giant treest or examine some object of interest, we are carried along with whirlwind speed; and when we have no object in stopping—nothing to interest us but a dirty, dingy tavern and its lazy inmates, we must wait for hours, and perhaps a day, for some conveyance. I have often regretted the lack of *patience*, but never more than in such cases. I hope sometime to have a range in this western world, and in a mode that will afford me an opportunity of stopping when and where I choose—to pay my respects to anything of interest I may meet.

When I left home, on the 3d of July, our cherry season was just opening with the earlier sorts; when I arrived at Cleveland, on the 5th, the earlier sorts were all gone, and but a few of the later ones remaining.

Cleveland is making great progress in Horticulture. She has a Society that holds weekly exhibitions during the season of fruits and flowers. They have a commodious Hall, erected by the Society. In the garden of the President, Geo. Hoadley, Esq., I saw a fine collection of cherries—and while I was in his garden his man sold the produce of a single tree for $10. Nor was it a large tree; planted some twelve years ago, but owing to the severity of that climate on the cherry, it is not larger than our seven year planted trees. I had the pleasure of visiting Dr. Kirtland, who is well known for his devotion to Horticulture, and natural science generally. I saw and tasted some seedling cherries which he has raised, and which promise to be of great value. He has transferred the trees to F. R. Elliot, Esq., who will propagate and dispose of them. Mr. E. has, he informed me, sent a description of two of them, to the Horticulturist.—In the garden of J. M. Woolsey, Esq., I also saw several seedling cherries, but it was too late in the season to judge whether they would be worth adopting into our list of sorts. Of course a new variety must possess some decidedly superior point to render it worthy of a name and culture.

Cleveland is delightfully situated, and will undoubtedly become a large and beautiful city. It has now a handsome public square, well planted with thrifty beautiful elms. On two or three of the finest streets there are rows of elegant villa residences, with grounds comprising from three to five acres each, laid out beautifully and planted and kept in the very best order. We visited a number of these, and were delighted with them, as well as with the taste, enthusiasm and skill of their proprietors. We doubt whether another city in the Union, of the size,

could produce so many gentlemen passionately fond of gardening, and possessing so much practical knowledge on the subject. At the time we were first there, (5th July,) there was a serious drouth that had affected vegetation much, and made the sandy street anything but pleasant;—but when we returned from southern Ohio, a week after, copious rains had fallen and everything was fresh and enlivened.

The cherry suffers much around Cleveland, Columbus and other parts of Ohio, as well as in Michigan, as far as we have been, from the effects of the sun on the trunk, both in winter and summer. We found the trunks wrapped up, in many cases, with straw and cloth. We suggest, as a remedy, *that the trees be not pruned up, as they usually are, but be allowed to branch out near the ground.* The trunk will thus be protected, which seems to be all that is wanted.—In Cincinnati, we are informed, they have almost abandoned the culture of the cherry, they are so much discouraged. We think that the trees grown as dwarfs or pyramids will suffer less, if they suffer at all. At any rate, the experiment may be tried. We consider it a great error to expose the trunks of cherry trees to the height of five, six and eight feet, in that climate.

Passing from Cleveland to Columbus, through the interior of the State, I was much disappointed with the condition of the country. It has been settled some 30 years and upwards—and this, in such a country, abounding with natural wealth and with every facility for its developement, should give the country an aspect of good culture and growing refinement. But, as a general thing, there are but a few, very few, evidences of either.

The system of field culture seems to be that usually suggested by laziness and ignorance combined. The houses old and dilapidated—orchards few and poor—gardens, none beyond a patch of cabbage or onions—school-houses miserable beyond description, fit only for occupation during the summer months; and the scholars, as might be expected, wild looking, dirty, and ragged.—Poor things, I felt most for them. There are not such wretched schools in the poorest portions of the old world, that claims to be civilized at all. It is to be hoped that this state of things will not endure long. Here and there I find that new settlers are coming in, and bringing with them skill, enterprise, and taste. Their example will be felt by their neighbors, and their success will induce others of like character to follow and settle beside them. Ten years hence, if I live to travel this way, I may find gardens and fruit trees to admire and talk of.

That portion of Ohio known as the Western Reserve is said to be the most highly cultivated. There and along the rich valley of the Ohio and some of the other rivers, we would no doubt find good gardens and orchards.

Columbus, the Capital of the State, is quite a pretty place—situated on the Sciota river in the midst of a fertile valley of land well adapted to gardening. Few cities that I have seen are so fortunate in this respect, as far as I can judge. Much taste begins to be manifested in the erection of dwellings. Collections of rare plants and fine fruits, too, are rapidly forming. Nurseries are springing up. Our friend Burr says he is going to beat the world (Cincinnati included,) with his strawberries. I was too late to see them.

The supply of vegetables in the market is excellent. I have seldom seen better. This business is mainly in the hands of Germans, of whom there is a large settlement near the town. It was quite a luxury for me to stroll among their richly laden stands and wagons, between four and five o'clock in the morning.

Columbus has also an active Horticultural Society. Mr. Latham, the President, has one of the finest collections of Native Grapes in the country. His vines are just coming into bearing. We found our friend Mr. Bateham there, as kind and gentlemanly as usual—busy with his "Cultivator" and his "little farm." Success to them both. I have seen many a district in Ohio where the "Cultivator" ought to circulate. Go on, friend B. You have a boundless field to work in, and the work must be done.

I had almost forgot to mention one of the most interesting objects that I saw in Columbus, in the way of Horticulture. A small garden, but filled with every thing, and every thing in perfection. At every step I was surprised and delighted.—Choice roses of various classes were in full bloom; so were dahlias, carnations, verbenas, and many other things. Plums, apricots, peaches, and grapes were bending under their load of fruit.—No curculio was there, or the sign of one; no blight or mildew; every spot where a tree or plant could be trained up, or stand, was filled.—It looked like a fairy scene indeed. The whole secret is, the things are taken care of—not a dead leaf or decayed fruit is allowed to remain a moment after falling. The walks are kept as clean as they can be swept daily; health and vigor is maintained throughout, by skillful and careful attention. Mr. Bateham may direct his negligent or unskillful neighbors to visit Mrs. McCoys. Her little garden is a perfect model of its size.

Raising of Pea Nuts.—A correspondent of the Genesee Farmer asks its editor whether Pea Nuts can be raised in this country? The editor says he don't know—but thinks they can not.

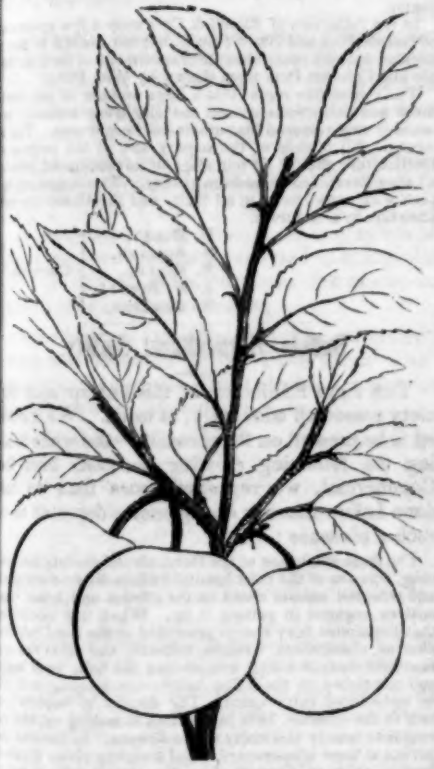
We can inform the editor and his correspondent that pea nuts can be raised here. The son of the editor of this paper raised a small quantity in the garden last year, which came to maturity previous to the middle of September.—They were planted at the usual time of planting in the spring, and ripened before frost without being transplanted. This spring he planted a more extensive quantity, which are doing well.—*Batavia Advocate.*

The editor of the Advocate, or his son, will oblige us by giving a detail of the process.—Ed.

The Cherry Plum.

That remarkably early, very pretty, and very distinct little fruit, the Cherry Plum, better known, in some gardens in the United States, as the *Early Scarlet*, and in the collections of Europe as the *Myrobolan*, is perhaps deserving of a few remarks from us, and of more attention at the hands of fruit cultivators, than it has hitherto received.

The Cherry Plum is not a high flavored fruit; it is only what may safely be called one of pleasant flavor. But it is, we believe, the *earliest* of plums; it ripens at a season when fruit of every kind is exceedingly scarce; and it is quite an ornamental as well as acceptable addition to the dessert in the month of July.



The Cherry Plum. (Fig. 45.)

This variety is a rapid grower, and soon makes a neat bushy tree, remarkable for the great number of its small pointed leaves. It always blossoms most profusely, but it is considered by many as a very poor bearer, and therefore rejected as of little value. It is on this point, that we wish to offer a suggestion of some practical importance. Mr. Samuel Reeve, of Salem, N. J., is the most successful grower of this plum, that we know; and the method he pursues, is worthy of attention, since he finds the *Cherry Plum* the most profitable variety, as a market fruit.

Mr. Reeve attributes the usual non-productiveness of the Cherry Plum, to the fact that it is inclined to too great a production of leaves and wood. He therefore *transplants* his bearing trees, every five or six years. In this way, the over-luxuriance is checked, and an abundant crop of fruit sets and ripens every year. As he is able to send this variety to the Philadelphia markets early in July, when there are no other plums to be found, he usually realizes from five to eight dollars per bushel for them. This, of course, makes a plantation of the Cherry Plum more profitable than one of any other variety, unless, perhaps, we except *Coe's Golden Drop*, or some such fine variety, equally valuable, from the usually *late* season at which it matures.

We presume *root-pruning*, performed every two or three years, would answer the same purpose, in rendering the Cherry Plum productive, as transplanting, and it would be attended with less labor and expense.—*Horticulturist.*

Culture of Sea Kale—(*Crambe Maritima.*)

[In answer to J. W., of Lyons.]

Your seeds may have been unsound. Soaking in boiling water for a few hours is better than cracking; but if the seed be fresh, neither is necessary.

The culture is quite simple. Any good, dry, rich, and mellow loam is suitable. The seeds may be planted as soon in the spring as the ground may be in good working condition, and the weather favorable for vegetation. Your seeds, by being cracked and planted while the soil was yet wet and cold, may have rotted. The seeds may be sown in a seed bed, in drills a foot apart, and allowed to remain there the first season. The second they may be transplanted into rows two feet apart, and six or eight inches in the rows. Or, the seeds may be sowed in rows where the plants are intended to remain. The seeds should be covered about two inches deep, and when they have made three or four leaves may be thinned out to proper distances, leaving the best plants, of course.

Some prefer the mode of planting in clumps, three or four plants to the clump, with space enough around each clump for walking and working. Pots or boxes can in this way be easily placed over the plants in the spring, to facilitate the blanching process, which greatly improves the quality of this vegetable for the table.

In the fall, before heavy frosts set in, the beds should be covered with a good coat (six or eight inches) of rotten manure, and in the spring, as soon as the leaves begin to push through this, the pots or boxes for blanching may be placed over them. The time to cut for use is when the leaves have attained three or four inches above the covering, and it should be cut at the surface of the ground, taking care not to injure the crown of the plant.

It should not be cut till the third year. Those who can not wait for the slower process of raising from seed can always procure roots at the nurseries, that may be cut from the year after planting. Fifty roots, or thereabouts, will be found sufficient to supply an ordinary family. It is boiled, dressed, and served up like asparagus.

Exhibition of Hort. Soc'y of the Valley of the Genesee.

We present below, in a condensed form, the Reports of the Committees on the June exhibition. The detailed Reports occupied three full columns of the daily papers. The Flower Committee, in particular, deserve great credit for the faithful and efficient performance of their duties. The names of every contributor, as well as of every article, including the splendid collections of Wild Flowers, have been presented in detail. We have now hopes for the success and usefulness of the Society.

REPORT OF COMMITTEE ON FLOWERS.

The Committee on Flowers, having carefully examined the great number of specimens presented for exhibition, would respectfully report:

That they have awarded the following premiums for the best display of Flowers comprising the greatest varieties:

Miss Francis Ward, for best Floral Ornament, ... $3 00
Mrs. S. O. Smith, for 2d best do. 2 00
Mrs. Alonzo Frost, for 3d best do. Mrs. Loudon.
Miss L. J. Whitney, greatest number and varieties of Boquets composed of Roses, &c., ... $2 00
Miss E. Child, for beautiful collection, ... Mrs. Loudon.
Mrs. W. B. Williams, " ..... "
Miss Julia West, " ..... "
Mrs. A. Gardiner, " ..... "
Miss S. Shaw, " ..... "
Mrs. J. W. Sawyer, " ..... "
Mrs. Geo. H. Mumford, " ..... "
Mrs. D. W. Powers, " ..... "
Mrs. Fitch, of Riga, " ..... "
Mrs. C. C. Lathrop, " ..... "
Mrs. H. Billing, for fine collection of Pansies, "

NATIVE FLOWERS.

Miss Rogers presented 66 species,
Mr. Wetherell " 55 "
Dr. Clark " 45 "
all correctly named.

Premiums on the above are to be awarded at the close of the year for the greatest number of species correctly named and tastefully arranged.

NURSERYMEN.

John Donalan—Paeonia humeii and Whitlejii, and a variety of roses.

Charles Powis, Monroe Gardens—A pyramid of Paeonia, Whitlejii and humeii, Amaryllis formosissima.

Ellwanger & Barry, Mt. Hope Nurseries—One splendid pyramid of 125 varieties of roses, 6 feet high, measuring at the base about 9 feet.

Four large boquets, consisting of the finest Roses, Pelargoniums, Verbenas, Phloxes, Spiraeas, Deutzeas, &c.

E. & B. also exhibited the following Roses, separately, named, in small vials: Hybrid Perpetuals, 25 varieties; Perpetual, 5 vars.; Provence, 5 vars.; Hybrid China, 34 vars.; Moss Roses, 12 vars.; Hybrid Provence, 4 vars.; French Roses, 5 vars.; Damask, 4 vars.; Prairie Roses, 3 vars.; Ayrshire, 4 vars.; Boursault, 3 vars.; Scotch, 3 vars.; besides Austrian Briars and other miscellaneous varieties. Also a handsome collection of Green House plants.

The Committee would further report:

That owing to the limited time for observation, they were unable to give a full report of all the varieties offered for exhibition. Your Committee unite in the opinion entertained by all present, that the Exhibition of Flowers, and particularly of Roses, far exceeded in quantity and variety any previous Exhibitions, and they hope that future Exhibitions will be equally deserving of the interest manifested in the present.

Mrs. J. Williams,
Mrs. D. Scoville,
Miss S. Shaw,
G. H. Smith,
S. Thompson, Jr.,
} Committee.

REPORT OF THE FRUIT COMMITTEE.

The Fruit Committee beg leave to announce the following premiums:

Strawberries.—For the best quart, Jno. Williams, Esq.; variety, Hovey's Seedling, ... $3 00
For the second best, Wm. Pitkin, Esq., ... $ 00
For the greatest number of varieties, (13) and best grown, Isaac Hills, Esq., President of the Society, 3 00

NURSERYMEN'S CLASS.

The only nurserymen exhibiting were Messrs. Bissell, Hooker, & Sloane, who had nine varieties and were awarded a Diploma.

The Committee having power to award discretionary premiums for articles of merit, have awarded one dollar to M. G. Warner, Esq., who exhibited three dishes of fine well grown Strawberries, and the same to E. K. Blythe, Esq., for a large and beautiful dish of well grown Strawberries.

There were a few Cherries presented just beginning to color, from Messrs. T. B. Hamilton and Ira D. Hall, and ripe Herefordshire Whites from Bissell, Hooker, & Sloane.

In addition to those above mentioned, fine specimens of Strawberries were exhibited by Mr. H. Leutweiller, and Mrs. E. N. Buell, of this city. The number of exhibitors were comparatively limited, but the specimens were perfect and beautiful.

Besides those exhibited at our former shows, there were in the collection of Isaac Hills, Esq., five specimens of Myatt's British Queen, a large and fine fruit, and Stafford Mammoth, a very large fruit from Ohio, but hollow and coarse.

In the collection of Bissell & Co., were a few specimens of Boston Pine and Black Prince, but not enough to pass a decided opinion upon—beautiful specimens of the Pine Apple and Carolina Pine were shown by Wm. Pitkin.

The Committee regret that a large number of fine specimens and collections around the city were withheld, because it was rumored that others had larger ones. This is wrong. All friends of the society and of the progress of Horticulture should, in our stage of advancement, present all they have of even medium quality. This suggestion applies with equal force to all fruit, and the Committee bespeak attention to it in future.

P. Barry,
A. Sawyer,
S. Miller.
J. W. Bissell,
S. Moulson,
} Committee.

Buffalo Horticultural Society.

The June Exhibition of this enterprising Society passed off admirably, as usual. We intended to be present on the occasion—and while reading the following glowing account, from the Commercial, we regretted more than we had done before that our engagements deprived us of such a pleasure:

The floral exhibition of the Horticultural Society last evening, was one of the most beautiful affairs we ever attended, and reflected infinite credit on the officers and ladies' committees engaged in getting it up. When it is recollected that the almost fairy scenes presented in the floral temples, alcoves, chandeliers, wreaths, festoons, and other rich and beautiful designs which ornamented the hall, were begun and completed in about five hours—our language will not be considered extravagant. The display of boquets was rich in the extreme, both in the taste in making up, and the exquisite beauty and rarity of the flowers. In the fruit department were numerous rich and tempting plates of strawberries, cherries, currants, &c.—the strawberries in particular, were very fine. Some fine fruit and flowers were exhibited by Mr. McIntosh and Mr. Cable from Cleveland, and by Col. H. H. Coit, of Euclid, Ohio. Altogether, the June exhibition may be considered as an era in the history of our Buffalo Horticultural Society. We were pleased to observe that the attendance in the evening was large, and the bids at the sale of fruits and boquets, both spirited and liberal. When all was so tasteful and beautiful, it were impossible to discriminate with justice. When the committee report, full justice will be done to all. How beautiful does woman appear among flowers—their white and red delicately blended on her cheeks, the former shining through the latter at every movement of her lips, their fragrance on her sigh, their purity in her heart, their delicacy in her very existence. No wonder that woman loves to breath the atmosphere of flowers, reflecting their smiles and rivaling their beauty.

LADIES' DEPARTMENT.

☞ The enlargement of the Farmer enables us to resume the "Ladies' Department." We shall endeavor to give at least a page, and more if possible, in each subsequent number, for the exclusive benefit of farmer's Wives and Daughters. It will afford us pleasure to receive and publish short communications upon Domestic Economy, &c., from those interested. M.

Making Preserves.

Currants.—Strip them from the stems. Allow a pound of sugar to a pound of currants.—Boil them together ten minutes. Take them from the syrup, and let the syrup boil twenty minutes, and pour it on the fruit. Put them in small jars, or tumblers, and let them stand in the sun a few days.

Currant Jelly.—Pick over the currants with care. Put them in a stone jar, and set it into a kettle of boiling water. Let it boil till the fruit is very soft. Strain it through a seive. Then run the juice through a jelly-bag. Put a pound of sugar to a pound of juice, and boil it together five minutes. Set it in the sun a few days.

Blackberry Jam.—Allow three quarters of a pound of brown sugar to a pound of fruit. Boil the fruit half an hour, then add the sugar, and boil all together ten minutes.

Raspberry Jam.—No. 1.—Allow a pound of sugar to a pound of fruit. Press them with a spoon, in an earthen dish. Add the sugar, and boil all together fifteen minutes.

Raspberry Jam.—No. 2.—Allow a pound of sugar to a pound of fruit. Boil the fruit half an hour, or till the seeds are soft. Strain one quarter of the fruit, and throw away the seeds. Add the sugar, and boil the whole ten minutes. A little currant juice gives it a pleasant flavor, and when that is used, an equal quantity of sugar must be added.

Pears.—Take out the cores, cut off the stems, and pare them. Boil the pears in water till they are tender. Watch them, that they do not break. Lay them separately on a platter as you take them out. To each pound of fruit take a pound of sugar. Make the syrup, and boil the fruit in the syrup till clear.—*Miss Beecher's Domestic Receipt Book.*

Polishing.—The ladies are very fond of keeping the door knobs, spoons, plates, &c., in brilliant order. Now, if instead of water and chalk and such preparations, ladies will use camphene and rotten stone, a far brighter, more durable, and quicker polish can be obtained that in any other way. Camphene is the article used for producing the exquisite polish of the Daguerreotype plates; and nothing has been found to equal it.

Making Butter.—Mr. Wm. Merrifield, of Guilderland, who received a premium for butter from the New York State Agricultural Society, in 1842, adopts the following mode for making butter: In winter, the milk stands in the cellar twelve hours; is then scalded over a slow fire to near boiling heat, the pans removed to the cellar; the cream only churned, which seldom requires more than five minutes to produce butter. I can testify to the superior quality of Mr. M.'s butter, having been using at my table for some days a sample made in the way described, and which is as high colored and nearly as rich as the best of June butter, though the cows were only fed with hay, and no coloring substance used.—*Alb. Cult.*

Dairy Utensils.—All dairy utensils should be scalded, rinsed and dried every time they are used. Glazed pottery is not considered desirable for milk or cream, as the acid contained in them acts upon the glazing (which is generally an oxide of lead,) and converts it into an active poison. Vessels made of wood are preferred by many to any others, for this purpose; although they are liable to become tsinted with the acidity of the milk, in which case they can only be thorcughly cleansed by boiling; and when this fails, a little salæratus added to the boiling water will effectually neutralize the acid. The vessels must afterwards be immersed for two or three days in water, which should occasionally be changed. Milk vessels may be made of maple, white ash, hickory, or white pine.—*Selected.*

Green Corn Pudding.—The Louisville Journal says one of the very best things ever brought to the table, in the pudding line, is green corn pudding, prepared according to the following recipe. Let every wife, who would like to surprise her husband by a rare delicacy, try it.—Take of green corn twelve ears and grate it; to this add a quart of sweet milk, a quarter of a pound of fresh butter, four eggs well beaten, pepper and salt as much as sufficient; stir all well together, and bake four hours in a buttered dish. Some add to the other ingredients a quarter of a pound of sugar, and eat the pudding with sauce. It is good cold or warm, with meat or sauce; but epicures of the most exquisite taste declare for it, we believe, hot and with the first service.

"A word to the wise," &c. Try it.—*Sel.*

To destroy Red Ants.—As every housekeeper may not know how to get rid of these troublesome little intruders, I will state my experience. Place a piece of fat bacon, or a pan of grease or butter near the place where they enter the kitchen or pantry. This will soon attract them together, when they can be easily removed, or destroyed by a little hot water. Thousands may be destroyed in this way in a few days.—*Ohio Cultivator.*

How to make Currant Wine.—Break and squeeze the currants; put three pounds and a half of sugar to two quarts of juice and two quarts of water. Put in a keg or barrel. Do not close the bung tight for three or four days, that the air may escape while it is fermenting. After it is done fermenting, close it up tight. Where raspberries are plenty, it is a great improvement to use half raspberry juice, and half currant juice. Brandy is unnecessary when the above mentioned proportions are observed. It should not be used under a year or two. Age improves it.—*Mrs. Child's Frugal Housewife.*

We give the above in answer to inquiry of S.

Training of Children.—The instruction of your children cannot commence too early.—Every mother is capable of teaching her children obedience, humility, cleanliness, and propriety of behavior; and it is a delightful circumstance that the first instruction should thus be communicated by so tender a teacher. It is by combining affectionate gentleness in granting what is right, with judicious firmness in refusing what is improper, that the happiness of children is promoted, and that good and orderly habits are established. If children are early trained to be docile and obedient, the future task of guiding them aright will be comparatively easy.—*Nicholls.*

Several articles from correspondent are deferred, for want of room, until next month.

Acknowledgments.

We continue, this month, our list of acknowledgments—giving the names of those persons who have forwarded 13 subscribers or over. It would afford us pleasure to add the names of numerous friends who have procured from 5 to 12 subscribers, each—but are unable to do for want of "ample room and verge enough." All, however, will please accept our hearty thanks for their substantial favors.

G. H. Arne, P. M.,	30	Apollus Kent,	16
Jacob Boyer,	35	J. Ladd, P. M.	14
C. Brewer,	18	John Lewis,	17
Jno. F. Barber,	16	J. L. Lewis,	16
J. L. Beebe,	15	A. Langworthy, P. M.	13
B. D. Brown,	14	J. W. Merrill,	30
I. H. Butterfield,	14	A. G. Melvin,	18
H. G. Buffum,	14	E. S. Marvin,	16
S. Booth, P. M.,	13	Wm. McGown, P. M.	14
O. C. Comstock, Jr.,	30	D. Munger,	13
H. H. Cole, P. M.	20	C. Nye, Jr.,	15
A. Cleveland, Jr.	17	H. P. Norton,	13
D. Carpenter, P. M.	16	R. Northrop,	13
Chas. Carter, P. M.	16	D. A. Ogden, P. M.	65
W. Churchill,	14	P. M. at Oxford, N. Y.	17
W. Chapman, P. M.	13	A. Osborn, (Ohio,)	16
P. K. Deyo,	17	Allen Payne,	19
L. S. Dudley, P. M.	14	R. E. Perry, (Mich.)	13
R. Davis,	14	O. Robinson, (Canada,)	16
T. Donnellan, (Texas,)	14	J. W. Runyan, P. M.	13
Geo. Earll, P. M. (Iowa,)	17	R. Rockwood,	18
J. K. Eshleman, (Pa.,)	16	W. M. Sprague, P. M.	30
R. Edwards,	16	J. A. Smith, (Ohio,)	28
C. Fenton, P. M.	14	Henry Swan, P. M.	23
T. Foster, P. M.	13	J. D. Stone, P. M.	19
E. H. Gilbert,	50	L. Smith, P. M.	19
B. F. Gage,	13	C. C. Sutton, P. M. (Mich.)	18
Ira Green, P. M.	13	S. G. Smith, P. M.	16
O. B. Hopkins, P. M.	16	Milton Smith, P. M.	16
C. Hull, P. M.	14	G. C. Spencer, P. M.	16
C. H. Howe, P. M.	13	J. A. Stimson, (Mich.)	14
E. Jones, P. M. (Mich.)	25	A. Scott, P. M.	23
I. L. Jenkins,	22	I. R. Trombly,	13
C. Jarvis, P. M.	14	N. Wesson, P. M. (Wis.)	19
Hervey Johnson,	13	Wm. C. Ward, P. M. (Pa.)	14

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,	$1 00	1 12	Pork, bbl. mess	15 00		
Corn,	63		Pork, cwt.,	5 00		
Barley,	50		Beef, cwt.,	5 00		
Oats,	40		Lard, lb.,	8	9	
Flour,	5 50		Butter, lb.,	12		
Beans,	75	87	Cheese, lb.,	7	7½	
Apples, bush.	50		Eggs, doz.,	9	10	
Potatoes,	—		Poultry,	—		
Clover Seed,	4 50		Tallow,	9		
Timothy,	1 50	2 00	Maple Sugar,	—		
Hay, ton,	9 00		Lamb Skins,	10	25	
Wood, cord,	2 00	3 00	Green Hides, lb	3½	4	
Salt, bbl,	1 06		Dry "	7	8	
Hams, lb,	7	8	Calf Skins,	8	9	

☞ The Wool Market is about the same as last month. Prices range from 20 to 40 cents.

Rochester, July 30, 1847.

New York Market.

[*By Magnetic Telegraph.*]

New York, July 30—7 P. M.

Flour and Meal—Before steamer's news was received market firm at 5 75 for Genesee, and good demand for filling contracts. Western 5 50 for strait brands. Steady demand. After the advices per Washington were received the market became unsettled and holders generally withdrew from the market. There were some sellers of Genesee at 6 25, and Michigan at $6, and buyers offered $6 for Genesee to some extent. The only sales are 500 bbls. western at $6 next week, and another small parcel Mich. at same figure. A contract for 1000 bbls. Genesee was settled at $6.25. There was a fair inquiry, but an indisposition on the part of holders to meet buyers. Sales 400 New Orleans at $4.75. After change the market was firm and meal was held up at $4 for Jersey. A sale of 400 bbls. was made before the news at $2,87 for western.

Wheat was in fair demand before the Washington arrived, and prices without change. A sale of 3000 bu. fair red Illinois $1.02; 2000 do. New Orleans $1,20,and 600 or 700 new imported Genesee, the first received this season, supposed at $1.31½ for milling.—Corn was selling before the news at 59 *a* 60 for heated, 62½ for mixed, and 64 *a* 65 for flat yellow, but holders afterwards advanced their demand to 75 cts. for round, 70 cts. for flat yellow, and 66 *a* 68 cts. for mixed. The aggregate sales of the day were 30,000 bu. of which about 10 000 were sold after the steamer at 66½ to 70 cts. for flat yellow. Round could be bought at the close at 71 *a* 72 cts. Oats are more plenty and a cargo sold at 50 cts. In Rye nothing done. Sales 2000 bu. barley at 55 cts.

The improved feeling in Pork continues. Tendency upward.—Sales 600 bbls. at $12,50 for prime, $15.25 for mess. At the close $15.25 was refused for mess. Sales 500 bbls. old at 12 and 15 for prime and mess. Beef without movement. In cut meats something doing. Sales 108 tcs. and 100 bbls. hams at 7⅛ *a* 7⅜ cts.—63 tcs. shoulders at 6¼ cts. Butter, fair demand.

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